Chronology of the North Indian Kings

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Rai Gyan Narain Prasad

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The Book

The present book is the result of judicious use of information on ancient Hindu calendar derived from the study of epic; puranic; ancient Indian astronomical literature and properly verified by the various modern scientific disciplines: astronomy; & Climatology etc. The brief survey of Hindu calendar is given in Ch. I of the book which is arranged in 8 chapters. The following chapter is planned to remove the misconceptions regarding the Indian eras including traditional Kaliyuga era. The 3rd chapter which deals with the various views regarding the date of Parikshit II is balanced and informative. The fourth chapter explains the gap of 300 years between Parikshit II and Janamejaya III which appears almost logical. Chapters V; VI; VII & VIII make effort to fix the chronology of north Indian kings from Parikshit II upto the Ashoka Maurya in the light of new dates for various Indian eras proposed by the author and ample of Puranic; Buddhist; Jain and Greek data.

The work is quite original, displaying erudition and acumen of a remarkable type. Statements are based on definite authorities. Conclusions are drawn on the basis of complete and accurate references. Author's approach of analysing our ancient chronological view in the light of most recent findings of Astronomy and Geophysics is unique. His efforts to establish the validity of Hindu calendar on the basis of modern scientific theories is certainly a valuable contribution to our historical knowledge. The arguments put forward by him to support his theories are convincing and impressive. There are useful chronological tables; an exhaustive index; self-definitive line diagrams and detailed bibliography.

AGAM

CHRONOLOGY OF NORTH INDIAN KINGS

DS
451
P76
1990

First Published 1990

© Rai Gyan Narain Prasad

ISBN : 81-7186-003-6

Published by
Agam Prasad, M.A., Ph. D., Diploma in Museology,
AGAM KALA PRAKASHAN
34, Community Centre, Ashok Vihar,
DELHI-110052 Phone : 7113395

Printed by
Arun Typographer
at Shiv Printers, Delhi-110035

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Acknowledgement

I wish to express my sincerest gratitude to Dr. Y.K. Misra, Reader, Ancient Indian and Asian Studies Department, Magadha University for his able supervision and keen interest during the progress of the work as a thesis for the degree of Doctor of Philosophy and making valuable suggestions and constant encouragement throughout the course of present study.

I am extremely grateful to the authorities of the Magadha University especially Hon. Vice Chancellor and Head of the Department, Department of Ancient Indian and Asian Studies, Magadha University, for giving me a permission to submit this work of international interest in the form of a thesis for the degree of Doctor of Philosophy.

With a special mention of indebtness, may I single out the name of Prof. Upendra Thakur, Professor and Head, Department of Ancient Indian and Asian Studies, Magadha University, whose encouraging letter dated 15.2.1980, as I have remembered, received as the first one when I was just beginning my studies on the project of Ancient Hindu Calendar and Chronology of Ancient Bhārata. Since then Prof. Thakur's help, concerning the valuable suggestions, constructive criticisms and constant encouragement, is always received by me throughout the course of my studies.

I am really much obliged to the authorities of North Eastern Railway, Signal & Telecommunication Department with a special

mention of Hon. A.B. Badhe, Chief S & T Engineer; M.M. Dwivedi; S.K. Gaur; K. Chowdhari; V.S. Srivastava and Lajpat Rai for their constant emboldenment to work hard on the project and furnished necessary permissions to attend a large number of conferences in India and abroad. Hon. C.S.T.E. has personally studied some of the papers with a keen interest to hearten me.

I am much thankful to my technical colleagues as well as my educational friends of various disciplines for their heated discussions which gives the ample of fresh data to study and analysis.

I am greatly indebted to the only sister R.R. Srivastava and brother-in-law Dr. V. Kumar for financial and moral help. Mother's contribution from the birth uptill now for tirelessnessly supplying life-sustaining emenities can not be expressed in words. Raju's assistance can not be forgetable.

Indebtness even beyond the all possible limits may be expressed in favour of 'some-one', she may be my sweat-hear !; a combination of planets in respective houses in the horoscope ?; subconscious or unconscious mind !! so called 'fate' or the supreme-power 'God' what was the entity behind this iron-curtain, I do not know exactly the case, whose contribution was in par-excellence to provide me a many thousands of lonely, cold and calm nights to collect, concentrate, analyse and calculate for the final results concerning the project, and bound me to feel a thrilling pleasure instead of a boredom or tired-ness.

I am encouraged too much during the course of my studies due to the following eminent scholars who have contributed advice, suggestions, congratulations, expertise, information, showing great interest and constructive criticisms to this scientific chronological project :

1. P.D. Agnihotri, Bhopal.
2. G.C. Agrawal, Founder President, Vidur Sewa Ashram, Bijnor.

3. D.P. Agrawal, Physical Research Laboratory, Ahmedabad.
4. V.V. Bedekar, President, Ins. for Oriental Study, Thane.
5. P.L. Bhargava, Prof. (Retd.) of Sanskrit, Rajasthan Univ., Jaipur.
6. K.D. Bajpai, Tagore Prof. (Retd.), Saugar Univ., Saugar.
7. V.B. Bhatia, Reader, Deptt. of Physics & Astrophys., Delhi Univ., Delhi
8. A.K. Chakraborti, M.R. College, Midnapur (W.B.).
9. S.K. Chatterjee, A.V.S.M. (Retd.), New Delhi.
10. C.W. Cowen, Director, Sch. of Orien. & African Studies, London.
11. V.N. Dutta, Prof. of History, Kurukshetra University.
12. Erich Van Daniken, Sweden.
13. K.N. Dixit, Arch. Sur. of India, New Delhi.
14. J.A. Eddy, Sen. Scientist, High Alt. Obs., N.C.A.R., Colorado, U.S.A.
15. P.H.L. Eggermont, Prof. of Indology, Univ. of Leuven, Belgium.
16. Ram Gopal, Kalidas Prof. of Sanskrit, Punjab Univ., Chandigarh
17. R.C. Gaur, Cen. of Adv. Study in History, A.M.U., Aligarh.
18. S.D. Goswami, Deptt. of History, Dibrugarh University.
19. J. Imbrie, Hen. L. Doh. Prof. of Oceanography, Brown Univ., U.S.A.
20. G.W. Kaveeshwar, Prof. & Principal (Retd.), Indore.
21. S.M. Katre, California, U.S.A.
22. S. Lienhard, Stockholm University, Sweden.
23. Phil. Christian Lindtner, Deptt. of Asian Lang. & Liter., Washington Univ., U.S.A.

24. B.B. Lal, Director, Ind. Ins. of Advanced Studies, Simla.
25. V.V. Mirasi, Prof. of History (Retd.), Nagpur.
26. Sengaku Mayeda, Prof. of Ind. Philosophy, Tokyo Univ., Japan.
27. W.F. Menski, Sch. of Orien. & African Studies, London.
28. J.V. Narlikar, Prof. of Astrophysiss, T.I.F.R., Bombay.
29. M.G.S. Narayanan, Head of History Deptt., Calicut University.
30. G.B. Palsule, B.O.R.I., Pune.
31. R.P. Poddar, Supdt. of Libraries, Patna.
32. A. Padoux, Cen. Nat. de la Res. Scientifique, Paris.
33. E. Pauli, Buddhist Scholar, Denmark.
34. V.S. Pathak, Prof. & Head, Ant. Hist. Deptt., Gorakhpur Univ.
35. B.V. Raman, Editor, The Astrological Magazine, Bangalore.
36. S.R. Rao, Director, Nat. Ins. of Oceanography, Goa.
37. N.C. Rana, Radio Astronomy Group, T.I.F.R., Bombay.
38. G.S. Sampath Iyengar, Gorour, Karnatak.
39. H.D. Sankalia, Prof. Emeritus, Deccan College, Pune.
40. K.V. Sharma, Adiyar Library & Research Centre, Madras.
41. P.S. Shastri, Univ. of Nagpur.
42. S.R. Sharma, Deptt. of Sanskrit, A.M.U., Aligarh.
43. K.S. Shukla, Prof. of Mathematics, Lucknow University.
44. A.M. Shastri, Prof. & Head, Deptt. of Ant. Indian Hist., Nagpur Univ.
45. B.J. Srivastava, Reader in Geomagnetism, N.G.R.I., Hyderabad.
46. S.C. Srivastava, Deptt. of Elect. Engineering, M.M.E. Coll., Gorakhpur.

47. R.K. Siddhantashastri, Prof. & Head of Hist. (Retd.), Calcutta Univ.
48. S.D. Sharma, Reader, Physics Deptt., Punjabi Univ., Patiala.
49. R.C. Sharma, Director, U.P. State Museum, Lucknow.
50. Ach. U.V. Shastri, Vir. Vedic Sodha Sansthana, Ghaziabad.
51. L.K. Tripathi, Prof. of Ant. Hist., B.H.U., Varanasi.
52. D.S. Triveda, Res. Prof., Prakrit Research Ins., Vaishali.
53. K.C. Varma, Jt. Dir., Ins. of Chronology, Ghaziabad.
54. S. Venugopalacharya, Mandaya, Karnataka.
55. Vidhata Misra, Vice Chancellor (Retd.), K.S.D.S. Univ., Darbhanga.
56. R.K. Verma, Prof. & Head, Deptt. of Ant. Hist., Univ. of Rewa.
57. V.S. Wakankar, Director, Bharti Kala Bhawan, Ujjain.
58. S.B. Roy, Director, Ins. of Chronology, Delhi.
59. A. Pezzali, Buddhist Scholar, Univ. of Bologna, Italy.
60. Robert Layton, Prof. of Anthropology, Univ. of Durham, England.
61. A.R. Singal, Prof. of Mathematics, Meerut Univ.
62. A. Wezler, Gen. Sec., 32nd ICANAS, Hamberg, Germany.

RAI GYAN NARAIN PRASAD

Preface

The Scientific Resurrection of Ancient Hindu Calendar done by me, is based on the Astronomical Theory of Ice-Ages and modern Cosmology. After getting a considerable success in my efforts, I have now focussed my attention in the present thesis to the chronology of the political history of Northern India from the birth of the Parīkshit II upto the coronation of Ashoka Maurya. The former was, chronologically, best known figure to the traditional history and calendar of Ancient India whereas the latter is, chronologically, best known figure to the systematic history and epigraphs of ancient India.

For chronological reconstructions, we equate 9090th year of Dhṛuva-saṃvaṭasara i.e. Polar era and 3030th year of the third cycle of Saptarishi era given in Vāyu and Maṭṣya Purānas, with 582 A.D., and can start the Kṛta yuga of Vaivaṣvata manvaṇtara with 8508 B.C. with which the geological holocene epoch roughly began and related to a traditional flood event of Manu Vaivaṣvata. If we equate the 'Dharma-pāda' structure for the present chaturyuga given in Sūrya Siddhāṇta 1/15-17 with the either direction of the average global temperature fluctuation within 6°C, plotted recently by Profs. G.H. Denton and W. Karlen, for holocene's little Ice-age cycles, then we can easily decode our ancient Hindu chaturyuga calendar atleast for the present Vaivaṣvata manvaṇtara, in climatological terms. In this chaturyuga calendar plan, present Kali yuga with which we are related chronologically in this thesis, began precisely with 1308 B.C.

Surprisingly, the last two figures**08 B.C. was in exact coincidence with an ancient 'Creation Era of Constantinople', began with 5508 B.C., used over the vast territory of India and Russia in ancient times. But due to the Greek-Babylonian astronomical import, after the Alexander's invasion, Kaliyuga beginning was first shifted to 1302 B.C. and afterwards to 3102 B.C. Purānic chronology uses 1302 B.C., whereas, our present day Pañchāṇgas uses 3102 B.C. Thus Purānas by using 1302 B.C. as Kaliyuga beginning, gave the year 1339 B.C. for the birth date of Parīkshit II. But according to the Saptarishi calendar this event coincided with 1362 B.C. The same epoch is assigned for the coronation of Somādhi, the Magadhan king of Bārhadṛatha dynasty, and 700/723 years is alloted for this dynasty over Magadha by the Matṣya Purāna. Thus Bārhadṛatha dynasty certainly ended in (1362-723 or 1339-700=) 639 B.C. In fact, according to my calculations, such a big epic war, if it was really a big one, can not be finalised merely in 18 days. It should must be prolong to a 18 years duration which might originally be mentioned as 18 divine-days=18 human years. In 18 divine-days war, Parīkshit born during the 12th divine-night i.e. the Winter season of 1350/1351 B.C.

By equating the 'Early Contemporary Dynasties' purānic statements (Pargiter's D.K.A., p. 69) with the end of Bārhadṛatha dynasty instead of, with the beginning of Nanda dynasty (as Pargiter assumed), on the basis of the inclusion of 20 Vītihotras also which were actually ended alongwith the Bārhadṛathas in the period of Pṛadyōta's father (D.K.A., p. 68), we find a general missing of atleast 15 or 16 kings from the purānic kings-list of Kurus, Aikśvākus, and Bārhadṛathas etc. On deeper epic and purānic studies, it is found that it was due to an actual missing of the history of about 300±30 years period between the Parīkshit II and the Janamejaya III. It was the period when Kurus (i.e. the successors of Pāṇḍavas), alone, enjoyed actually the total sovereignty over whole of the Northern India atleast, achieved in the Mahābhārata epic war, and ruled over the entire northern India from Hastināpur. Kalhaṇa's Rājataraṇginī 1/83 actually corroborates with the missing kings-list theory of 35 Kashmirian kings between Gonaṇda II (4th) and Lava (40th), out of

which according to the tradition, the first 23 kings belonged to the Pāṇḍava dynasty who ruled over Kashmir from Hastināpur beginning with Parīkshit II after the death of issueless king Gonaṇda II. Thus it would be more logical to fill the gap between the Parīkshit II and the Janamejaya III from the kings-list of the successors of Parīkshit II mentioned in Mulla Ahmad's History of Kashmir. It gives an average number of 46 kings between the birth of Parīkshit II and the coronation of Śiśunāga of Magadha and Ujjain (1339-467 B.C.) and an acceptable average of 19 years per king.

We have further analysed, in great detail, the Purānic chronology; the Buddhist chronology of Magadha and Ceylonese kings-list alongwith the Buddhist Thera's list and also the Jain tradition for the kings of Ujjain and the chronology of Jain Yuga-Pṛadhānas upto the period of Ashoka and Sampṛati. The study of Buddhist Thera's list facilitates the correct placement of Thera Chandavajji (420-362 B.C.) which resulted the compensation of the 58 years short-fall crept in the Buddhist chronology, raises the period of Nav-Naṇdas to the (424-324 B.C.=) 100 years (the purānic figure) from 22 years (the Buddhist figure), in which Mahā(paḍma)naṇda, according to Bhaviṣya Purāna, was the last among the nine, coronated in 336 B.C. Thus confirming the purānic statements that between the birth of Parīkshit II and the coronation of Mahā(paḍma)naṇda there elapsed only (1351-336 B.C.=) 1015 years interval. All these chronological results leads us, finally, to the 544 B.C. date for Buddha's Mahāparinirvāṇa as Ceylon-Burma-Siam tradition already intended. By all the study means, we have concluded that Ashoka's coronation was really taken place in 265 B.C.

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1

Scientific Resurrection of Ancient Hindu Calendar

I. 1. INTRODUCTION

In the Sṛisti-Kālakrama section of our Purāna and Pañchāṇgas Chaturyuga, Manvaṇtara, Mahāyuga, Kalpa and Mahākalpa etc. the ancient Hindu Calendarial concepts are given. Had these ancient concepts any scientific basis ? Our modern scientists and historians presuppose that those were merely an imaginative product of ancient undeveloped primitive human mind. Here, we have to analyse these concepts in the light of most recent findings of modern astronomy and geophysics etc.

I.2.1. *Chaturyuga of 12,000 Sāvana Years*

According to the ancient Hindu astronomical classic Mayāsura's Sūrya-Siddhāṇta 1/15, the total of the four yugas is 12,000 in terms of years and 43,20,000 in terms of Sūryābdis. Saṇskrit commentaries took 'Year' in the context of Divine-year and Sūryābdis as Human-years. E. Burgess remarked on 1/13-14 : 'In the astronomical reconstruction of Purānic system, however, a physical meaning has been given to the day of gods: the gods are made to reside at north pole, and demons at the south pole[1] whereas human beings at near-equatorial region and then, of course, we have got a geophysical

difference of 360 times between the polar (divine) day and the near-equatorial (human) day'. But because one and the same earth orbits around the Sun for the concept of year: both polar (divine) as well as equatorial (human) year. Therefore, divine and human years become an equivalent term. Consequently, Sūrya-Siddhāṇta 1/15 can be re-interpreted as : the total of four yugas is 12,000 in terms of human sāvana years and 43,20,000 in terms of human sāvana days (Figure I). Āryabhattiyam, Kālakriyāpāda, verse 7 & 8 also intended the same thing because the Manes were supposed to reside on the opposite side of the moon.[2] Since, length of a day on the moon (i.e. the period of one rotation around its own axis) as well as the length of a year on moon (i.e. the period of one revolution around the earth have the same duration, i.e. equal to one lunar month or 30 lunar days on earth. Therefore, the day and year of Manes are the equivalent term i.e. must be equivalent to a lunar-month of men instead of 30 Solar years.

In order to give a firm scientific footing to the ancient Hindu Chaturyuga calendar, we can use the precessional cycle of equinoxes of earth. Plato's precessional cycle of equinoxes of 25,920 years (which is in close approximity to the modern value) was actually composed of two Chaturyugas of 12,000 years separated by two saṇdhi periods of 960 years (25,920=960+12,000+960+12,000). Plato's value 25,920 years when divided by 960 years (the period taken by the geomagnetic poles to make one orbit around the geographic poles of earth) gives the quotient 27, leaving no remainder, which was the fundamental basis of Hindu Nakshatra system. On relating with the precession of equinoxes, Chaturyuga calendar also coincides exactly with the Adhemar's half precessional cycle of glaciation period on either hemisphere of earth.[3] Astronomical Theory of Ice-ages finally proposed by an Yugoslavian astronomer M. Milankovitch (1938) speculates that Ice-ages due to the influence of precessional cycle dominates over the axial-tilt cycle Ice-ages in near equatorial region (Figure II).[4]

I.2.2. *Chronology of Present Chaturyuga (Vaivaṣvata Manvaṇtara)*

Ancient purānas and pañchāṇgas made the term Chaturyuga synonymous to the term Mahāyuga instead of the term Manvaṇtara and the present Mahāyuga is said as the 28th of the 7th Manvaṇtara, the Vaivaṣvata. Our purānas, unanimously, gave only 95 solar-dynasty kings (Kṛta : 1-40; Tretā : 41-65; and Dwāpara : 66-95) between the Manu-Vaivaṣvata and the Bṛhadbala of Mahābhārata epic-war[5] which sounds exactly that Manu-Vaivaṣvata took his birth at the start of the Kṛta-yuga of present Chaturyuga instead of the Kṛta-yuga of 28 Mahāyugas ago. Therefore, Manvaṇtara and Chaturyuga are the equivalent terms. In this way also, the present Kaliyuga of the 7th, Vaivaṣvata, manvaṇtara can be counted as (7×4=) 28th yuga.[6]

Our reference point, for the present Chaturyuga chronology, is the 78 A.D. i.e. the beginning date of the Śaka-era. On the basis of Vārāhmihira's Bṛahaṭsaṃhitā, Saptarishichāra, XIII/3,[7] we can equate the 3,030 years Saptarishi cycle with the 2,448 B.C.-582 A.D. of the Christian calendar whose 2,526th year coincided with the beginning of Śaka-kāla. According to Vāyu 39/17-18 and Maṭṣya 56/13-14 Purānas, 9,090th Dhṛuva (Kraoñch)-Samvaṭsara coincided with the 3,030th Saptarishi Vaṭsara.[8] Therefore, Dṛuva-samvaṭsara, i.e. Polar-era began with (the 582 A.D.–9,090 years=) 8,508 B.C. This date is, surprisingly, coincided with the flood event of Manu-Vaivaṣvata with which the Kṛta-yuga of Vaivaṣvata-Manvaṇtara began.[9]

In Sūrya-Siddhāṇta 1/16, the quantum of distribution of the four yugas of a Chaturyugi is inclusive of their saṇdhi-periods and has to be arranged according to the order of their Dharma-pāda beginning with Kṛta-yuga. 1/17 tells that the tenth part of a Chaturyuga multiplied, successively, by 4:3:2:1 give the length of the Kṛta and other yugas.[10] If we equate the 'Dharma-pāda' structure for the present Chaturyuga (Vaivaṣvata-Manvaṇtara) given in Sūrya-Siddhāṇta 1/15-17 with the either direction of the average global temperature fluctuation within 6°C recently plotted by Profs. G.H. Denton & W. Karlen,[11] we can decode our ancient Hindu calendar, at least for

the present Vaivaṣvata-Manvaṇtara in climatological terms (Figure III) with full scientific accuracy as follows :

TABLE I

Yuga Name	*Dharma pāda*	*Climatological Representation*	*Duration in Years*	*Duration in Sūryābdis*	*Christian Calendar Date*
Kṛta	1	W ↑ C	1,200	4,32,000	8,508-7,308 B.C.
Tretā	2	W W ↓ ↑ C	2,400	8,64,000	7,308 4,908 B.C.
Dwāpara	3	W W ↓ ↑ ↓ C C	3,600	12,96,000	4,908-1,308 B.C.
Kali	4	W W ↑ ↓ ↑ ↓ C C C	4,800	17,28,000	1,308 B.C.-3,492 A.D.

Honestly speaking, our analysis has two radical differences from the traditional view-points : (i) we use human years instead of divine years, and (ii) we use Kṛta, Tretā, Dwāpara, Kali in 1:2:3:4 Dharma-pāda ratio rather than the traditional 4:3:2:1 one.

I.2.3. *Verificational Points*

For verification, we use a large number of diverse and independent sources e.g.

(i) Beginning of Kṛta-yuga (8508 B.C.) is verified by the Manu's flood event with the help of ancient Hindu, Iranian, Greek, Egyptian, Mayan, and Hopi-Amerindians traditional calendars.[12]

(ii) Beginning of Tretā-yuga is verified by the beginning of agriculture. Ancient Purānas (Harivaṃsha, ch. 10, verse 12-20; Vāyu, ch. 8, verse 45-48; 52-60; 77-96; 123; 130-154) tell us that Agriculture began with the beginning of Tretā-yuga (*c.* 7300 B.C.). Archaeology also endorses this very epoch (7300±300 B.C.) for the beginning of agriculture.[13]

(iii) End of Dwāpara (i.e. the beginning of Kali-yuga) in 1308 B.C. may be verified by a number of sources--(a) Scholars agree that Vedas came into their written existence around 1500 B.C., whereas tradition agree that Ved-Vyāsa wrote Vedas just before the Mahābhārata epic war; (b) Viṣṇu; Bhaviṣya; and Bhāgwata Purāna (Sk. XII, Ch. II, V.30-31) tell us that the Kali-yuga of 1200 years only began just after the pass-away of lord Kṛṣṇa. Bhaviṣya Purāna (Pṛati-sarga parva, Bhāratakhaṇda asthastadasha rājyasthāna 1-9) tell us explicitly that between the end of Mahābhārata epic war and the beginning of Vikṛamāditya epoch, there elapsed only 1200 years.[14] We know, traditionally, that Vikṛamā-saṃvata began with 57 B.C. and it was, initially, known as Kṛtasaṃvata in the inscriptions,[15] thus, it was certainly believed up to that time that 1200 years of Kaliyuga was actually ended with the beginning of Kṛta-saṃvata of Vikṛamāditya, therefore, Kaliyuga should begin around 1300 B.C.

(iv) This scientific Chaturyuga calendar along with the other Purānic genealogical king-list data are successfully applied to analyse the detailed chronology of the post-Mahābhārata-war North-Indian kings of Magadha; Aikshvāku; Kuru; and Kaśmir kingdoms.

I.3. MAHĀYUGA OF 182,640 SĀVANA YEARS

In scientific scheme of Hindu calendar, Mahāyuga (not the Kalpa) is composed of 14 Manvaṇtaras plus 15 saṇdhi-periods. Therefore, a Mahāyuga is composed of $(12{,}000\times14)+1200+(960\times14)=182{,}000$ Sāvana years (Figure VI). Vārāhamihira accepted in his Pāñcha-siddhāṇtikā (Sūrya-Siddhāṇta 1/14) that for the 'Ahargaṇa-calculation' only the 24th part of the traditional-Mahāyuga period is sufficient which is equal to the 180,000 tropical years[16] or 182,640 sāvana years. Mahāyuga concept of 182,640 sāvana years can be related, scientifically, to the Ice-ages corresponding to the variation cycle of eccentricity of the earth's orbit around the Sun. According to U. Leverrier (1843 A.D.), the French astronomer, 100,000 years ago, the eccentricity of earth was 6% and it becomes near-zero and it should reach to 6% again in another 100,000 years.[17] Therefore, it takes approximately 200,000 years, or the period of a Mahāyuga of 182,640 sāvana

years, from one high eccentricity state to the next. Ice-ages of Mahāyuga durations are already verified by the CLIMAP group of American geologists.[18] In my calculation, the last high eccentricity epoch i.e. (12,000 × 6) + 1200 + (960 × 6) + 8508 B.C. = 87,468 B.C.[19] coincides with the start of the first, Swayāṃbhuva, Manvaṇtara and also with the Border-cave discovery of the well-civilized Homo sapiens of Peter Beumont and Adrina Boshier (Figure IV & V).[20]

I 4. KALPA-AHORĀTRA CYCLE OF 365.28 MILLION YEARS

According to Sūrya-Siddhāṇta 1/20 : the Kalpa, thus composed of a thousand Mahāyugas and which brings about the destruction of all the exists, is styled a day of Bṛahmā; his night is of the same length.[21] Day and night are collectively known as an Ahōrātra. Therefore, duration of a Kalpa is equal to the (182,640 × 1000 =) 182,640,000 sāvana years and the Ahōrātra becomes (=2 kalpas) of 365,280,000 sāvana years. An ahōrātra is composed of : 45,660,000 years (dawn) + 136,980,000 years (day) + 45,660,000 years (twilight) + 136,980,000 years (night). Day epoch of the present Śweta-Vārāha Kalpa, started 71 Mahāyuga ago, began from [(182,640 × 70) + 87,468 B.C. =] 12,872,068 B.C. or 12.87 million years ago and the dawn epoch began from [12,872,068 + 45,660,000 =] 58,532,068 B.C. or 58.53 million years ago. The beginning of the day epoch coincides exactly with the 14 million years old fossil findings of the first hominid Ramapithecus,[22] whereas the dawn epoch with the origin of Pigs and Boars (i.e. Vārāha) and even primates of Eocene epoch of geology.[23] An ahōrātra cycle of Bṛahmā can, scientifically, be related to the parabolic orbit of the Sun around the Galatic-core[24] in which the aphelion portion represents the cool-Day of Bṛahmā and responsible for the long-regime Ice-ages[25] of 182.64 million years, whereas perihelion portion represents the warm-Night of Bṛahmā i.e. long-regime interglacial phase of another 182.64 million years. This cycle is also responsible for the continental-drift, large-scale floods and all about the major changes in the organic evolution of life-forms on the earth. In this way, we can find late precambrian glaciation of 700 million years ago; permo-carboniferous glaciation of 300 million years ago; and the present, late-cenozoic glaciation started from 55

million years ago[26] as the Day-epochs of the 34th; 35th (paḍma); and 36th (vārāha) Kalpas respectively. Whereas "middle-Cambrian-middle-Silurian" and "late-Triassic—early-Tertiary" periods can be designated as the Nights of 34th and 35th (paḍma) Kalpas respectively (Figures VII & VIII).

I.5. BṚĀHMA-YEAR CYCLE OF 77.76 BILLION YEARS

According to the Sūrya-Siddhāṇta 1/21, a year of Bṛahmā contains only 200 Ahōrātras.[27] Bṛāhma-year begins with a cosmic-egg (Vāyu Pur. 6/72) which has a dormancy period of 4.704 billion years. Therefore, duration of a Bṛāhma-year is (365,280,000×200)+4,704,000,000=) 77.76 billion years. According to Vāyu Purāna ch. 21-23,[28] the present, Vārāha, is the 36th Kalpa which gives, in turn, the beginning of the Kalpa Hindu calendar from (365.28 m. yrs. × 35) +58.53 m. yrs. = 12.843 billion years ago with the "BHĀVA" Kalpa. On the basis of the modern "Big-Bang" cosmology, Dr. Allan R. Sandage of Hale Observatory, U.S.A. gave a Pulsating-model of the Universe having a pulsation cycle of 80 billion years, in which a cosmic egg after an initial explosion expands, at a constantly slowing down rate, for 40 billion years, after a momentarily halt, it began to contract for another 40 billion years and give finally another cosmic-egg at the end of contraction phase. We are living at about one-third, i.e. 13 billion years from the beginning, of the one of the expansion-cycles.[29] These findings of the modern cosmology are in exact coincidence with the ancient Hindu findings. According to my calculations, origin of the Sun was taken place in 22nd, Meghavāhana Kalpa (Vāyu Pur. 21/46-47)[30] from 5.17 billion years ago.[31] Evolution of life (i.e. Sarga system of Purānas), in 9 sargas, began with the 27th, Darsham Kalpa from 3.346 billion years ago : in which the evolution of sex (i.e. the Maithuni-sṛisti of Daksha-Prajāpati) was taken place in the 7th sarga (i.e. 33rd, Viṣhva-rūpa, Kalpa) from 926.07 million years ago; Invertebrate life i.e. 8th Sarga: 789.09—423.81 m. yrs. ago; Vertebrate life i.e. 9th (Kaumar) sarga : 423.81—58.53 m. yrs. ago (paḍma-kalpa) and primates (human group) evolved in the 10th (Manuśya) sarga from 58.53 m. yrs. ago. During Sarga (day of Bṛahmā) half-cycle, life-forms enjoy a favourable environment

referred as "evolutionary-explosion" whereas during Prati-sarga (night of Bṛahmā) half-cycle, life-forms pass through unfavourable condition referred as "great extinction" and undergo to the various adaptations. Therefore, Sarga-Pṛatisarga cycle of our own Hindu ancient Purānas as well as Punctuational model of modern evolution biology both admits the fact that the evolution in the life-processes was not gradual and continuous, but often experienced the episodes of "evolutionary explosion" and "great extinctions".[32]

I.6. THE TOTAL LIFE-SPAN OF BṚAHMĀ

Our Hindu Pañchāṇgas give the duration of 311,040,000,000,000 years for the total life of Bṛāhma.[33] But Vāyu Purāna 22/4-6 and Shiva Purāna 7/6/20-21 tells that 8,000 Bṛahmā-years make a Bṛahmā-yuga; 1000 Bṛāhma-yugas make a "Savana" and 3000 or 6000 Savanas make probably the total life of Bṛahmā.[34] In my calculations, the duration of Bṛāhma-yuga comes as (77,760,000,000, × 8,000 =) 622,080,000,000,000 or 622.08 trillion years. It shows that the half Bṛāhma-yuga duration is exactly equal to the total life-span of Bṛahmā given in Pañchāṇgas. The duration of a Bṛāhma-yuga coincides exactly with my calculations of "gradational-cosmology". The total life-span of Bṛahmā of 3.6×10^{21} years given in Vāyu and Shiva Purānas would play a leading role in determining the life-span of "Proton" given by the recently developing, "Unified Field Theories" of "Electro-weak" and "nuclear" interactions proposed by the Particle-Physicists.

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2

Misconceptions Concerning The Indian Eras and their Beginnings

II.1. KALI SAṂVATA AND ITS BEGINNING EPOCH

II.1.1. *Introduction*

The Scientific Resurrection of Ancient Hindu Calendar, done by me, is based on the Astronomical Theory of Ice-Ages and modern Cosmology. After getting a considerable success in my efforts, I have now focused my attention in the present thesis to the chronology of the political history of Northern India from the birth of Parikshit II up to the coronation of Ashoka Maurya. The former was, chronologically, best known figure to the traditional history and calendar of ancient India whereas the latter is, chronologically, best known figure to the systematic history and epigraphs of ancient India.

For chronological reconstructions, we equate 9090th year of Dhṛuva-saṃvaṭsara i.e. Polar era and 3030th year of the third cycle of Saptarishi era given in Vāyu 39/17-18 and Maṭṣya 56/13-14 purānas, with 582 A.D. and we can start the Kṛta-yuga of Vaivaṣvata manvaṇtara with 8508 B.C. with which the geological holocene epoch roughly began and related to a traditional flood event of Manu Vaivaṣvata.

If we equate the 'Dharma-pāda' structure for the present Chaturyuga given in Sūrya Siḍdhāṇta 1/15-17 with the either direction of the average global temperature fluctuation within 6°C, plotted recently by Profs. G.H. Denton and W. Karlen, for holocene's little Ice-Age cycles, then we can easily decode our ancient Hindu Chaturyuga calendar at least for the present Vaivaṣvata manvaṇtara, in climatological terms. In this Chaturyuga plan, the present Kaliyuga, with which we are chronologically related in this thesis, began precisely with 1308 B.C. Surprisingly, the last two figures **08 B.C. was in exact coincidence with an ancient 'era of Constantinople' began with 5508 B.C. used over the vast territory of India and Russia in ancient times. But due to the Greek-Babylonian astronomical import, centuries after the Alexander's invasion, Kaliyuga beginning was first shifted to 1302 B.C. and afterwards to the 3102 B.C. in preference to the 'Era of Alexandria' began with 5502 B.C. Purānic chronology used 1302 B.C. whereas our present day Pañchāṇgas uses 3102 B.C.

II.1.2. *Traditional Statements concerning the Chaturyuga Calendar*

Purānas often mention the Chaturyuga calendar as follows:

चत्वायार्हु सहस्त्राणि वर्षाणां तत्कृतं युगम् ।।93।।

तत्य तावच्छतो संध्यासन्ध्यांशश्च तथाविधः ।
त्रीणि सहस्त्राणि वर्षाणि च विदुर्बुधाः ।।94।।

शतानि षट च राजेन्द्र सन्ध्यासन्ध्यांशशयो पृथक ।
वर्षाणां द्वे सहस्त्रे तु द्वापरे परिकीर्तिते ।।95।।

चत्वारि च शतान्याहुः सन्ध्यासन्ध्यांशशयो बुधः ।
सहस्त्र कथितं तिष्ये शतद्वय समन्वितम् ।।96।।

एतद् द्वादश सहस्त्रं देवानां युगम् उच्यते ।।97।।

(*Bhaviṣya Purāna, Bṛāhma Parva*)

that Kṛta yuga have a period of (4000+800=) 4800 years and then

Tretā yuga : (3000+600=) 3600 years; Dwāpara yuga : (2000+400=) 2400 years and Kaliyuga : (1000+200=) 1200 years. This system, in fact, according to my calculations and belief, was the reversal of Kṛtā: 1200; Tretā : 2400; Dwāpara : 3600 and Kaliyuga : 4800 years more ancient system in which, linguistically, Kṛta was more nearer to 'quarter' rather than 'four' and Kali was certainly equivalent to 'one', whereas originally 'Tretā' and 'Dwāpara' words might be nearer to the German number 'zwei' (tsvai तसवाई =two) and 'drei' (drayee डराई =three) respectively,[1] rather than the later sanṣkrit word 'Dvā=two' and 'Tṛi=three'. Any way, during the time of Naṇda dynasty rule (or when the Purānic account about Naṇdas were compiled) the reversed system was in the currency, according to which it was supposed that Kaliyuga had an actual duration of 1200 years only :

यावत् स पाद पद्माभ्यां स्पृशन्नास्ते रमापतिः ।
तावत् कलिर्वैपृथ्वीं पराक्रान्तुन चाशकत् ।।

यदादेवर्षयः सप्तमधासु विचरन्ति हि ।
तदा प्रवृतस्तु कलिद्वादशाब्दशतात्मक ।।

यदामघाभ्यो यास्यन्ति पूर्वाषाढ़ा महर्षयः ।
तदानन्दात् प्रभृत्येष कलिवृद्धिं गमिष्यति ।।

(*Bhāgwata Pur.*, Sk. XII, Ch. II, Ver. 30-32)

that till the lord Kṛṣṇ touched the earth with his lotus-feet, the Kaliyuga did not able to accompany with earth. When lord Kṛṣṇ left the earth and Saptarishis left the Maghā nakshatra, the Kaliyuga of 1200 years began. When Saptarishis would reach to Poorvāshādha in the reign of Naṇda-bhṛityas i.e. Chaṇdragupta Maurya, then the Kali would attain its full strength. Bhaviṣya purāna, Pratisarga parva, Bhāratakhaṇda ṣthāṣtādaśa Rājyasthāna chapter tells us:

प्रातः काले च संप्राप्ते पाण्डवाः पुत्रशोकिनः ।
प्रेतकार्याणि ते कृत्वा भीष्मान्तिकमुपाययुः ।।1।।

राजधर्मान्मोक्षधर्मान्दानधर्मान्विभागशः ।
श्रुत्वायजन्नश्चमेधैस्त्रिभिरुत्तमकर्मभिः ।।2।।

षटत्रिंशदब्दराज्यं हि कृत्वा स्वर्गपुर ययुः ।
जामिष्यन्ते तदेशा वै कलिधर्म विवृद्धये ।।3।।

इत्युक्त्वा स मुनि सर्वान्पुनः सूतीवादिष्यति ।
गच्छत्वं मुनयः सर्वे योगनिद्रावशो ह्यहम् ।।
चक्रर्तार्थ समाधिस्थो ह्यायेऽहं त्रिगुणत्परम् ।।4।।

इतिश्रुत्वा तु मुनयो नैमिषारण्यवासिनः ।
योगसिद्धिं समास्थाय गमिस्यंत्यात्मनोन्तिके ।।5।।

द्वादशाब्दशते कालेऽतीते ते शानैकादयः ।।6।।

उत्थाय देवखाते च स्मानाध्यादिकाः क्रियाः ।
कृत्वा सूतान्तिकं गत्वा बदिऽयति पुनवर्चं ।।7।।

विक्रमाख्यानकालोऽयं द्वापरे च शिवाज्ञया ।
विनीतान्भगवन्भूतौतदा तान्नृपतीन्पद ।।8।।

स्वर्गंगते विक्रमादित्ये राजानो बहुधाऽभवन् ।
तदाष्टादशराज्यानि तेषां नामानि में श्रृणु ।।9।।

Rishi Sūta told : "in the morning, with the dripping sorrow for their dead sons, after performing the necessary post-mortem rituals, Pāṇḍavas were near the Bhīṣma, the grand-father (1). They performed three Aśvamēdha Yajña after learning by heart the Rājyadharma; Mokshadharma and Dānadharma (2). After ruling for 36 years, all were gone to the heaven and they would again incarnate in Kaliyuga for the special advancement of religion (3). Rishi Vyāsadēva said that the further would be told by the Sūta. All munis go now. At this time, now I am approaching to yōganidṛā. By establishing myself into the deep meditation in the Chakratīrtha, I am just going to be concentrated on 'Para' beyond the 'Tṛiguṇa' (4). On hearing it, all the munis, i.e. the inhabitants of Nēmisāraṇya, would fell in deep meditation (5). After passing the 1200 years, Shaunaka and other rishis got awakened and took their bathe in Dēvakhāta i.e. divine-pond and worshipped their favourite deities and then they would gather again for their further enquiry in the period of rishi Sūta (6-7). Rishis enquired from Sūta that it was the time of Vikṛamākhyāna as assured by the God-

Shiva in Dwāparayuga to us. O Bhagwāna! please tell us further (8). Rishi Sūta told that there ruled many kings in the 18 sub-divisions of Bhāratavarsha after the king Vikṛamāditya making his journey to heavens. Now listen about them (9)".

This quotation tells us that between the end of Pāṇḍavas and the beginning of Vikṛamāditya, there elapsed only 1200 years rather than 3000 years, and thus, Vikṛamāditya born in, as per my works, (1301 B.C.+1200 Kali=) 101 B.C.[2] In tradition also, it is believed that Vikṛamāditya born in 101 B.C.[3]

II.1.3. *Traditional Statements Concerning the Modified Yuga Calendar*

Later period's tradition, compell us to believe that Kaliyuga began with 3102/3101 B.C. Therefore, the interval between the beginning of Kaliyuga era and Kṛtayuga era (i.e. of Vikṛamāditya saṃvata) was no longer of 1200 years duration. The 1800 years pushback duration got added with 1200 years and thus resulted to (1200+1800=) 3000 years interval. Bhaviṣya Purāna, Pṛatisarga parvaṇ, 3/1/7/14-19 is also quite aware about this make-shift as follows :

पूर्णे त्रिंशच्छते वर्षे कलौ प्राप्ते भयंकरे ।। 14।।

शकानां च विनाशाधर्मार्यंधर्म विवृद्धये ।
जातश्शिवाज्ञया सोऽपि कैलासादगुह्यकालयत् ।। 15।।

विक्रमादित्यनामानं पिता कृत्वा मुमोदह ।
स बालोऽपि महाप्राज्ञः पितृमातृप्रियंकर ।। 16।।

पञ्चवर्षे वयः प्राप्ते तपसोऽर्थे वनं गतः ।
द्वादशाब्दं प्रत्यनेन विक्रमेण कृत तपः ।। 17।।

पश्चादम्बावतीं दिव्यां पुरीं यातः श्रियान्वित ।
दिव्य सिंहासनं रम्यं द्वात्रिंशन्मूर्तिसयुतम् ।। 18।।

शिवेन प्रेषितं तस्मै सोपि तत्पदमग्रहीत् ।
वैतालस्तस्य रक्षार्थ पावत्या निर्भितो गतः ।। 19।।

About 3000 years after the advent of the detestable Kaliyuga

(3101 B.C.+3000 years=) 101 B.C. by the commands of Shiva, a divine personage from the abode of Guḥyakas (an order of supernatural beings on the Kailāsh took birth in human form as the son of king Gaṇdharvasēna on the earth to destroy the Śakas, foreigners and to resuscitate the Ārya-dharma. The king rejoiced at it and named him Vikṛamāditya. He was very wise even in the boyhood. He was dear to his parents. Even at the age of five, he went to the forest for meditation and observe severe austerities for 12 years. Then he returned with all the powers earned by his austerities to the city of Aṃbāvaṭī and was crowned on the celebrated Golden throne decorated with 32 golden images in the year 3020 of the Kali era or (3101 B.C.+3020 years=) 81 B.C. Birth : 3000 Kali; 3006 Kali going to the forest for austerities; 3019 Kali : return from the forest after 12 years; and then after learning the wisdom of stories (famous) from one Betāla, the coronation in Kali 3020— inauguration of Vikṛama era in Nepal 3044 Kali, the length of his reign extended over 100 years and he passed away in Kali 3120.[4]

Thus traditional sources intended that it was the Kṛtayuga began with the birth of legendary Vikṛamāditya (1200 years after the beginning of Kali in 1302/1301 B.C. in a more ancient system or 3000 years of Kaliyuga in modified system of 3102/3101 B.C. beginning) in 102/101 B.C. But in fact, the original Kṛita saṃvata of ancient Indian inscriptions began with 81 B.C. i.e. 1220 or 3020 with the coronation of legendary Vikṛamāditya, and became famous in later period by the names of Mālava saṃvata and finally as Vikṛamāditya saṃvata began with 3044 Kali i.e. 57+1 B.C.

II.1.4. *Greek-Babylonian Effect on Ancient Hindu Chaturyuga Calendar*

The modified calendar plan clearly accords with the traditional Pañchāngas' view and shows a clear evidence of Greek-Babylonian influence. In this plan, for Kṛtayuga, it utilises the round figure of 1200 years (i.e. 4,32,000 days or Sūryābdis) as purānas permit for the duration of first yuga-pāda rather than the odd figure of 1267 years, based on the 4,56,000 years (Greeks took it as the number of days in

their chronological calculations) the duration of Antediluvian Sumerian gods given in ancient Babylonian king-list WB 444. Dwāparayuga of 2400 years, started with the 'Creation era of Alexandria' (began with 5502 B.C.) and precisely ended with the traditional Pañchāngas' Dwāpara yuga end in (5502 B.C.+2400 years=) 3102 B.C.

TABLE II

CALENDAR OF GREEK INFLUENCE

Yuga Name	*Dharma-pāda*	*Sūryābdis*	*Years*	*Christian Calendar Date*
Kṛta	1	4,32,000	1200	6702—5502 B.C.
Dwāpara	2	8,64,000	2400	5502—3102 B.C.
Tretā	3	12,96,000	3600	3102— 498 A.D.
Kali	4	17,28,000	4800	498—5298 A.D.

The main defect in this calendar plan was the position of the Tretā yuga (3102 B.C.-498 A.D.). According to Hindu tradition, running at that time, Tretā yuga should must precede the Dwāpara yuga rather than to succeed. Therefore, astronomers who were interested to revive the, already forgotten, traditional yuga calendar, on the basis of Greek chronology omitted the position of Tretā yuga and started their Kaliyuga just after the end of Dwāpara yuga with 3102 B.C. This is why Fleet,[5] Sengupta, Whitney, Burguess and V.A. Smith etc. did not find it in the Vedic literature. According to Fleet, it was first started 3600 years after the time (i.e. Kali 3600 actually represented the end of Tretā yuga and the beginning of Kali yuga in this modified calendar plan) for the purpose of calculations (as a practical era used in inscriptions) and was not known to astronomers before Āryabhatta (or more correctly not before 498-99 A.D.).

Even after accommodating the 1200 years for Kṛta yuga before the Greek 'creation eras', based on the 1267 years duration of

Antediluvian Sumerian gods, the Chaturyuga calendar plan, based on Greek chronology, had still missed a duration of (3000-1200=) 1800 years. Due to which, the beginning of Kaliyuga swings just like a pendulum for a duration of±1800 years. On either side of the actual figure 1300±8 B.C. among the traditional Sanskrit scholars (viz. Kota Venkatachelam, Sriniwas Raghavan, R.K. Siddhantashastri etc.) and the modern European scholars (viz. Fleet) on the basis of omission or non-omission of the third yuga-pāda (Tretā yuga) of 3600 years. The another deviation from Hindu tradition was that where the Hindu traditional chronology places Manu Vaivaṣvata after the diluge, Greek chronology gave an epoch 1267 years before their creation eras began in 5500±8 B.C.

II.2. SAPṬARISHI SAṂVATA AND ITS BEGINNING EPOCH

There is also a large number of misconceptions concerning the Sapṭarishi saṃvata. It was the common belief, before my works, on Sapṭarishi calendar that Sapṭarishis take 2700 years (i.e. accurately a 100 years per nakshatra) to make one complete round. In my opinion, if Sapṭarishis really move in an observational astronomy sense, then its motion through a nakshatra-division of the zodiac should not strictly be accurate to a 100 human years. The 100 years per nakshatra period might be the round figure. Fortunately, Maṭṣya and Vāyu purānas give 3030 human years period for one Sapṭarishi vaṭsara as follows :

त्रीणि वर्ष सहस्त्राणि मानुषेण प्रमाणत: ।
त्रिंशदन्यानि वर्षाणि स्मृतः सप्तर्षिवत्सर: ।।

(*Maṭṣya* 56/14; *Vāyu* 39/18)

It gives an accurate figure of 112 years, 2 months and 20 days of Sapṭarishi's journey per nakshatra in a 27-nakshatra-division system whereas 108 years 2 months and 17 days in a 28-nakshatra-division system. Vārāhamihira's Bṛhaṭsaṃhitā, Sapṭarishichāra XIII/3 tells us :

आसन्मघासु मुनयः शासति पृथ्वीं युधिष्ठिरे ।
षट्द्विक पञ्चद्वियुतः शककालस्य राज्ञश्च ॥

Scholars uptil now interpreted it as follows : 'the Munis (Saptarishis) were in Maghā when king Yuddhisthira ruled the earth. And 2526 years, when added to Śaka-kāla, was the date of the king (Yuddhisthira). We know that Saka era began with 78 A.D. If we apply this beginning, then the beginning of Yuddhisthira era may come to the (2526 years-78 A.D.=) 2448 B.C. Kalhaṇa uses the same interpretation of Bṛhatsaṃhitā XIII/3 in his Rājataraṇginī 1/51 and concludes as follows :

शतेषु षट्सु सार्धेषु त्रयाधिकेषु च भूतले ।
कलेर्गतेषु वर्षाणामभुवन कुरू पाण्डवा ॥

that Mahābhārata war was fought [(100×6)+(100/2)+3=] 653 years after the beginning of Kaliyuga. P.C. Sengupta[6] also used the above interpretation of the Bṛhatsaṃhitā XIII/3 statement (though he admitted the fact that the first part of the XIII/3 statement, has remained a riddle to all researchers upto the present time –Anc. Ind. Chronology, p. 15) and gave the date of the Bhārata war i.e. the date of Yuddhisthira era beginning with 2449 B.C., the (3102 B.C.-2449 B.C.=) 653rd year of the traditional Kaliyuga.

But the close look at the verse XIII/3 of Bṛhatsaṃhitā's Saptarishichāra, which tells about the motion of Saptarishis, reveals that the original language of the verse does not ditto its existing translation : 'that Śaka-kāla began 2526 years after the king Yuddhisthira'. It gives plainly the dates of the two unrelated and totally different events in a single dating system i.e. in Saptarishi calendar. Verse XIII/3 reveals itself its true meaning as follows : "that Munis (Saptarishis) were in Maghā (i,e. in the 10th nakshatra of the zodiac) [when king Yuddhisthira ruled the earth and 2526th year of Saptarishi era was coincided with the beginning of Śaka-kāla in 78 A.D. Thus we may begin the Saptarishi calendar from 2448 B.C., preferably with the constellation Aṣhwani 0°, the true beginning point of the zodiac, in the time of Vārāhamihira. This consideration in conjunction with

the 3030 years Saptarishi cycle given in Matsya and Vāyu Purānas, in my opinion, greatly simplifies the problem of Saptarishi calendar. With all the relevant data we may work out a Saptarishi calendar in 27- and 28- nakshatra system as follows :

TABLE III

SAPTARISHI CALENDAR

S.No. Name of Nakshatra	*27-Nakshatra System*	*28-Nakshatra System*
1. Acvinī	2448-2336 B.C.	2448-2340 B.C.
2. Bharanī	2336-2224 ,,	2340-2232 ,,
3. Kṛttikā	2224-2112 ,,	2232-2124 ,,
4. Rohini	2112-2000 ,,	2124-2016 ,,
5. Mrgacīrsha	2000-1887 ,,	2016-1907 ,,
6. Ārdrā	1887-1775 ,,	1907-1799 ,,
7. Punarvasu	1775-1663 ,,	1799-1691 ,,
8. Pusya	1663-1551 ,,	1691-1583 ,,
9. Acleshā	1551-1438 ,,	1583-1475 ,,
10. Maghā	1438-1326 ,,	1475-1366 ,,
11. Purv-Phālguni	1326-1214 ,,	1366-1258 ,,
12. Uttara-Phālguni	1214-1102 ,,	1258-1150 ,,
13. Hasta	1102- 990 ,,	1150-1042 ,,
14. Citrā	990- 877 ,,	1042- 934 ,,
15. Svāti	877- 765 ,,	934- 825 ,,
16. Vicākhā	765- 653 ,,	825- 717 ,,
17. Anurādhā	653- 541 ,,	717- 609 ,,
18. Jyesthā	541- 428 ,,	609- 501 ,,
19. Mula	428- 316 ,,	501- 393 ,,
20. Purv-Ashādha	316- 204 ,,	393- 284 ,,
21. Uttara-Ashādha	204- 92 ,,	284- 176 ,,
22. Abhijit	.....	176- 68 ,,
23. Cravana	92 B.C.-20 A.D.	68 B.C.-40 A.D.
24. Carvisthā (Dhanisthā)	20-133 A.D.	40-148 ,,
25. Catabhishaja	133-245 ,,	148-257 ,,
26. Purv-Bhādrapada	245-357 ,,	257-365 ,,
27. Uttara-Bhādrapada	357-470 ,,	365-473 ,,
28. Revati	473-582 ,,	473-582 ,,

Pargiter in his 'Dynasties of Kali Age (p. 75)', on the basis of the various purānic statements, concludes that the Great-Bear was situated in the lunar constellation Puṣhya while Pratīpa (ancestor of Parīkshit in the seventh degree) was king. At the end of Āndhras, who will be in the 27th century afterwards, the cycle repeat itself. Pargiter assigns 814 years between Pratīpa to Parīkshit; 1050 years for Parīkshit to Mahāpaḍma Naṇda and 836 years for Mahāpaḍma Naṇda to the end of Āndhras which totals out to (814+1050+836=) 2700 years for a complete Sapṭarishi cycle. We may assign 336 B.C. date for the Mahāpaḍma Naṇda's coronation and thus, the whole chronology for the Sapṭarishi cycle, on the basis of the periods estimated by Pargiter, may be summarised as follows : 'Pratīpa to Parīkshit covers 2200 B.C.-1386 B.C.; Parīkshit to Mahāpaḍma Naṇda: 1386 B.C.-336 B.C. and Mahāpaḍma Naṇda to the end of the Āndhras : 336 B.C.-500 A.D.

The emendation made by Pargiter of the Purānic statement that Sapṭarishis were in Puṣhya constellation in the time of king Pratīpa and covers a period of 814 years to reach to the Maghā nakshatra in the time of king Parīkshit was totally a blunder. Because Sapṭarishis at the most take only a 200 years to cover a gap of only two nakshatra division. The original language of the sloka, dealing with the Pargiter's statement no. 1 (D.K.A., pp. 75), tells that it was the king Pṛāṃśu (or Pṛāhu?), probably several generations before even the king Kuru and the constellation was in reality the 'Agni'. In olden times, constellations were also designated by their presiding deities and the fire-god 'Agni' was in reality the presiding deity of Kṛttikā. According to my '27-nakshatra Sapṭarishi calendar' calculations, Sapṭarishis were in Kṛttikā nakshatra (2224-2112 B.C.) around 2200 B.C.

Though the period of (2200 B.C.-500 A.D.=) 2700 years from the king Pṛāṃśu up to the end of Āndhras was the historical fact but when it is applied to designate the beginning and end epochs for the one complete cycle of the movement of Sapṭarishis, then it becomes erroneous. Because these two belonged to the fixed zodiac's (i.e. nirāyana system) Kṛttikā to Aṣwani movement of Sapṭarishis in forward direction rather than Aṣwani to Aṣwani, in a fixed zodiac

(nirāyana system), which would be essential for the true calculation of the total time taken by the Saptarishis to complete its cycle. In Pargiter's statement no. 2, when it is said that Āndhras ended in 24th constellation of Saptarishi calendar then it would mean that Āndhras ended in 24th constellation after Kṛttikā nakshatra i.e. in (3+24=) 27 nakshatra, the Revati, according to the present zodiac system beginning with the first point of Aries i.e. Aṣwani 0°. According to my calculations, the end of Āndhras in *c.* 500 A.D. actually coincides with the Revati century (470-582 A.D.) of Saptarishi calendar.

Therefore, Vārāhamihira's Bṛhatsaṃhitā, Saptarishichāra, XIII/3 statement : 'that Saptarishi cycle began 2526 years before the Śaka-kāla beginning (78 A.D.-2526 years=) 2448 B.C. with Aṣwani 0° point, the reference point with which the fixed (nirāyana) zodiac system began in the time of Vārāhamihira, is correct. When Saptarishi calendar was further progressed upto the end of Āndhras in 500 A.D. then it gives approximately (2448 B.C.+500 A.D.=) 2948 years for the complete Saptarishi cycle which is in close approximity with the 3030 years Saptarishi cycle statement of Matsya and Vāyu Purānas. Thus we may conclude our thesis on Saptarishi cycle by saying that the third Saptarishi cycle has the period of (2448 B.C.-285 A.D.=) 3030 years, in nirāyana system, in confirmity with all the available statements—Purānic; Astronomical and Epigraphical. But the precession of equinoxes, in backward direction, is a scientific fact. Thus in Sāyana system, Saptarishi cycle has a period of approximately 2700 years only, the traditionally better known figure. Now, we can summarise the various important Saptarishi era dates as follows :

1.	Beginning of Saptarishi era with Aṣwani 0°	2448 B.C.
2.	Kṛttikā (Agni) century or the epoch of Pṛāṃśu	2224-2112 B.C.
3.	Maghā (Mahābhārata war) century	1438-1326 B.C.
4.	Pūrv-Ashādha (successors of Naṇdas) century	316- 204 B.C.
5.	Beginning of Śaka-kāla	78 A.D.
6.	Uttara Bhādrapada (Hisse-Borla Ins.) century	357-470 A.D.
7.	End of Āndhras in 24th (Revati) century	470-582 A.D.

The benefit of doubt for the scholars of various schools concerning the statements of Saptarishi calendar, in fact, lies completely behind the curtain of nirāyana and sāyana zodiac systems. Initially, the first cycle of Saptarishi calendar was assumed to begin with the beginning of Vaivaṣvata manvaṇtara in 8508 B.C., when Vernal Equinox was coincided with the Maghā 0° with which the Dhṛuva-saṃvaṭasara or Kṛauñcha-saṃvaṭasara i.e. Polar era of Maṭṣya 56/13 and Vāyu 39/17 Purānas reckoning began. The successive Sapṭarishi cycles and their corresponding christian era dates and other details are as under :

TABLE IV

SAPṬARISHI CYCLES OF VAIVAṢVATA MANVAṆTARA

Sapṭarishi Cycle Aṣwani 0°— Aṣwani 0°	*Vernal Equinox Position at the beginning of Sapṭarishi Cycle*	*Polar Era Date*	*Christian Era Date*
First cycle	Maghā 0°	0-3030	8508-5478 B C.
Second cycle	Punarvasu 0°	3030-6060	5478-2448 B.C.
Third cycle	Rohinī 0°	6060-9090	2448B.C.-582 A.D.
Fourth cycle	Aṣwani 0°	9090-12120	582-3612 A.D.

Because, the first Sapṭarishi cycle began in 8508 B.C. when vernal equinox was at Maghā 0°, therefore, it was often traditionally believed that the beginning of Sapṭarishi cycle should always coincide with the Maghā 0° in a fixed zodiac system. Due to this tradition, the beginning epoch 2448 B.C. of the third cycle of Sapṭarishi is often confused with the Maghā century of Sapṭarishi cycle (1438-1326 B.C. in the Vārāhamihira's nirāyana zodiac system) during Parīkshit's time, when vernal equinox, in backward precession, coincided with the Rohini 0° or Kṛttikā 13°20′ i.e. the last point of Kṛttikā. The 2448 B.C. epoch may be designated as Maghā 0° in nirāyana zodiac system fixed in 8508 B.C.; Rohini 0° or Kṛttikā 13°20′ in the sāyana zodiac system; Aṣwani 0° in the nirāyana zodiac system fixed in the time of Vārāhamihira. All these points are identical, but really a confusing one, due to the precession of equinoxes and the fixation of

various nirāyana zodiac time to time, probably, readjustable with the beginning epochs of each Saptarishi cycles. I prefer in this work the present nirāyana system fixed in the time of Vārāhamihira. Thus according to my present belief, beginning of the third Saptarishi cycle with 2448 B.C., in the Vārāhamihira's nirāyana zodiac system, from Aswani 0°, when vernal equinox was near the last point of Krttikā, was in reality confused with the Vārāhamihira's nirāyana zodiac's Krttikā period (2224-2112 B.C.). Saptarishis might have coincided with the Sāyana Krttikā 10° i.e. with vernal equinox around (2140± 25 B.C.=) 2118 B.C., thus reducing the cycle of 3030 years into 2700 years.

II.3. BUDDHA'S MAHĀPARINIRVĀNA SAMVATA

Though there are the numerous schools of thought and tradition on this issue ranging from 1807 B.C. (Kota Venkatachelam) to 368 B.C. (P.H.L. Eggermont). But now a days, scholars prefer two schools of chronology viz., (1) Ceylon-Burma-Siam tradition of 544-43 B.C. and (2) the dotted record of Canton tradition of 483-486 B.C. which roughly have a difference of (544 B.C.-486 B.C.=) 58 years. In sec. VII.3 of this work, we have found, according to Dīpavamsha, Ach. Chandavajji (a prestigious monk mentioned as twin component of Thera Siggava) seems to be seated as the Chief of Vinaya from 124 pBm to 182 pBm i.e for (420-362 B.C.=) 58 years. In this period, a Pataliputra Buddhist mahāsamgīti (i.e. great-council) was convened in 137 pBm (=407 B.C.) during the reign of king Nanda/Mahāpadma by the previously expelled Vajjian-monks. The attitude of Ācharya Chandavajji in this council was contrary to the Orthodox School of Sthaviras, therefore, Orthodox monks at any time before the coronation of Ashoka Maurya might have brushed-off the full period of Ach. Chandavajji's Vinaya-pamokkhataship from their Pali chronicles of Thera's list. This conspiracy was echoed in (1) Maghadha kings-list as the reduction of 80 years of Nandas into 22 years; (2) Ceylonese kings-list as reduction of 70 years of the interregnum period between the king Abhaya and Pandukābhya into 17 years and 5 years was attached in the reign of king Abhaya; and (3) a fresh copy of the Vinaya-Pitaka manuscript omitted 58 dots which is responsible to

create 486 B.C. date for Buddha's death. When the Pali chronicles were finally edited, they had inserted this 58 years missing period anywhere in the Ceylonese kings-list after Ashoka's epoch in order to synchronise the current 27th year of king Mahāsena with (846 pBm-544 B.C.=) 302 A.D.[7] This theory further corroborates with an inscription belonging to the 28th year of Upatissa I (368-410 A.D.) which mentions 941st pBm date (i.e. 544 B.C.+940 pBm=) 396 A.D. and also with the contemporaneousness of king Meghavarṇa of Ceylon and Samuḍragupta of Magadha.

As a result of our analysis, we will find that 544 B.C. date for the mahāparinirvāna of Buḍdha deserves a better claim. In the historical period context from the birth of Parīkshit II up to the coronation of Ashoka Maurya, the Mahāparinirvāna date of lord Buḍdha deserves as one of the pivot-dates for the settlement of Pre- and Post-Buḍdha chronology.

II.4. MAHĀBĪRA NIRVAṆA SAṂVATA

Jain sources preferred to mention the chronology of Ujjain instead of Magadha, after the death of Mahābīra. Jain source Avachoori of Pṛākṛit Paṭṭāvali named as 'Duṣṣamā-kāla-Shṛaṃna saṃghastva' of Dharmaghosha sūri of 1300 A.V., Jain Tīrthaṇkar Mahābira and Chaṇda Pṛadyōta, the king of Avaṇti (Ujjain), both died in the same night of Kārttika Amāvaṣyā (i.e. on the the eve of Dīpāvali festival) of 545 B.C.[8] and simultaneously king Pālaka, the successor of Chaṇda Pṛadyōta, began to rule for 60 years. A lot of controversy and misconception shrouded this very date i.e. 545 B.C. for the death of Mahābira. In all certainty, in the 60 years rule af Pālaka statement, it was originally intended that the kings of Pṛadyōta dynasty, after the death of Chaṇda Pradyōta, ruled for 60 years (=545 B.C.-484 B.C.) over Avaṇti. But when the defeat of issueless king Udayin of Magadha was annexed in this statement and those Jain traditions which accepts the purānic date 467 B.C. for the death of Udayin might fix the wrong date (467 B.C.-60 years=) 527 B.C. for the death of Mahāvira and Chaṇda Pṛadyōta, the most widely famous Śvetāṃber tradition date. This 527 B.C. date, also, finds its most celebrated

verification when we apply it in conjunction with the 470 years interval between the death of Mahābira and the beginning of Vikṛamāditya saṃvata statement in order to fix the Vikṛama saṃvata beginning with 57 B.C.

Still those, who equated the death of king Udayi in 467 B.C. with the death of Mahābira, can fix the wrong death date of Mahābira in 467 B.C. as Jacobi, Carpentier and Hemachandra intended by giving 155 years interval between the death of Mahābira and the coronation of Chandragupta Maurya. In reality, the 155 years period belongs only to the Naṇdas of Jain tradition who does not mention Śaśunāgas separately from Naṇdas. Duṣṣamā-kāla Paṭṭāvali and 60 years Pālaka's rule to the 155 years rule of Naṇdas and gives 215 years interval between the beginning of Duṣṣamā-kāla (instead with the death epoch of Mahābira) and the coronation of Chaṇdragupta Maurya. Duṣṣamā-kāla was the Jain calendarial time-unit (just like the Kaliyuga of Hindus) began 3 years, 8 months and 1 Paksha precisely after the death of Mahābira (mentioned in Kalpasūtra of Bhaḍravāhu; Ṭrilōka Prajñapṭi T.P., 4,1474). Khartaragaccha paṭṭavāli includes this 4 years and gives 219 years interval between the death of Mahābira (*c.* 545 B.C.) and the coronation date of Chaṇdragupta Maurya (*c.* 326 B.C.).

Digaṃbara Jain traditions, on the other hand, consider the 'enlightenment (kavaḷya) date i.e. 575 B.C.' for the beginning of 'Vīra-nirvāṇa' saṃvata tells that the beginning of Śaka saṃvata might be either 461 years or 793 or 795 years of the Vīra-nirvāṇa saṃvata. 461 years data begins a Śaka era with (575 B.C.+461 years=) 114 B.C. definitely used in the inscriptions of Śakas and Indo-Parthian kings before the advent of Kaniṣka. 793 or 795 years data begins the Kalachuri saṃvata with (545 B.C.+793 or 795=) 248 or 250 A.D.

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6. Sengupta, P.C., J.R.A.S B. (L), III, pp. 110-119; IV, pp. 393-413.

7. Rhys Davids, Camb. Hist. of India, I, 172 states : "that the 218 years interval between Buddha's nirvana and Ashoka was first mentioned in the Pali chronicles in 4th century A.D.; also see his doubts in Enc. Brit., XI ed., 1910, Vol. IV, 1737; Vincent Smith, Oxford Hist. of India, pp. 58-70; H.K. Deb, PAIOC, Poona, 1919.

8. It would be quite legitimate to accept the datum of the Anguttara Nikāya which implies while Nigraṇth Nātaputra (-Mahāvīra) died at Pāvā, the Buddha was still living (H. Oldenberg, Z.D.M.G., 34, 749).

3

Date of the Birth of Kuru King Parikshit II

III.1. MAHĀBHĀRATA EPIC WAR : THE CONTROVERSY OF MYTH AND REALITY

The problem of the date of the birth of Kuru king Parīkshit II is intimately related to the problem of the date of Bhārata war, and by implication its historicity, has been exercising attention of not only the scholarly world in India, but also even the general public ever since 1974. Vidur Sewa Asharam, Bijnor, held two seminars during 1974 and 1975 and a number of eminent scholars from all parts of India participated in the discussions. They have also submitted their views in writing, and as usual, it has not been found possible to get universal agreement to a definite date. The author of this thesis is also actively engaged in this field of extensive research since 1978, and have greatly indebted to Hon. G.C. Agrawal, founder president, Vidur Sewa Aśram, for the encouragement by presenting a published copy of the proceedings and papers of the seminar to author on 9.12.1980.[1]

On the fourteenth of September 1975, Dr. D.C. Sircar, an eminent epigraphist, declared unequivocally to the UNI that the Mahābhārata was a myth, devoid of little historicity, opening, as it were, the flood gates of controversy all over the country. Traditional

Saṇskritic and Vedic scholars, historians and archaeologists have come down with an avalanche of articles and letters expounding their pet views and theories.[2] Drs. D.C. Sircar, H.D. Sankalia and B.B. Lal in press interviews published in papers like *The Hindustan Times*, *The Statesman*, *The Times of India*, *The Indian Express*, *The Hindu*, etc., between Sept.-Dec., 1975. The latter two gave lectures and read papers at the Indian Archaeological Congress, Chandigarh, 22nd-24th Dec., 1976. Yet, this is not the first time such a controversy has been racked up. Let us now consider the commencement of the present controversy and how it progressed as time went by.

III.1.1 *The Views of D.C. Sircar*

Sircar, the originator of the controversy, believed that the nucleus of the Mahābhārata was only a simple war-song of a "petty family or tribal feud" around which the legend of the epic developed at a much latter time. Sircar's main contentions are :[3]

(i) there is no reference to the Great War in the Vedic literature;

(ii) the exact period when the Mahābhārata event took place was uncertain even to the people of ancient India;

(iii) the Bhārata war has not been mentioned in the literature prior to 4th century B.C.;

(iv) Kurukshētra, the battle scene of the famous battle, does not figure in the Vedic literature as a battle field; and

(v) the very presence of several traditions in the Mahābhārata, according to Sircar, clearly exhibit complete lack of knowledge of the Bhārata war among the people of ancient India. But when the story gained immense popularity among the masses and the gradual evolution of the same into an epic, assignment of a date was considered necessary and several chronological postulates came to be advanced.

III.1.2 *The views of H.D. Sankalia*

Prof. H.D. Sankalia, supporting Sircar's view, is of the opinion, that, "the battle was largely a family feud and belonged to a time

when the result of a battle depended primarily on individual strength and prowess". He is rather critical about the date of the Mahābhārata war and his arguments mainly revolve around archaeological findings and deductions. Sankalia emphasised that although large armies have been involved in the battle, the role of the foot-soldiers therein is nebulous and while the Mahābhārata refers to war-chariots, cavalry as such is not mentioned. Finally, Dr. Sankalia is of the opinion that "archaeology has conclusive proof that the critical editions of the epics are not older than the fourth or fifth century A.D.[4]

III.1.3. *The Views of B.B. Lal*

As the controversy rolled on, Prof. B.B. Lal came forward on behalf of those who held the view that the Mahābhārata is not a myth. He has tried to correlate the archaeological evidence with the traditional account. According to him, there are at least there grounds on which we can say that the epic and purānic tradition has been corroborated by the archaeological evidence :[5]

(i) Most of the important sites connected with the main story of the Mahābhārata war have yielded from their lowest levels the material items of a culture designated by archaeologists as the Painted Grey Ware;

(ii) the P.G.W. pot have also been found at Kaushāṃbi which show a kind of degeneration in the ware that represents the last phase of the culture; and

(iii) there is clear evidence of a heavy flood in the Gaṇgā which destroyed the settlement of the PGW people at Hastināpur, the capital town of Pāṇḍavas. After that the site was completely deserted. When reoccupied, after a century or two, Hastināpur witnessed the arrival of a new culture—the N.B.P. culture.

These three archaeological facts corroborates the traditional account as follows : (a) on the basis of the C-14 and other dating systems the N.B.P. Culture is dated to 500-200 B.C. whereas the PGW culture is to 1100-500 B.C. or 1100-300 B.C. bracket. It means the

P.G.W. culture was there at most of the Mahābhārata sites during 1000-900 B.C., the date when the Mahābhārata war took place according to different calculations made on the Purānic data, particularly, those by Pargiter and of his own (B.B. Lal); (b) According to Maṭṣya Purāna (50,57,65,66,78-79) and Vāyu purāna (99/249b, 250, 256-58) when Hastināpur was destroyed by a flood of the Gaṇgā, king Nichaksu, fifth in the line of Pāṇḍava rulers, shifted his capital from Hastināpur to Kaushāṃbi. The archaeological evidence of flood at Hastināpur, according to Prof. Lal corroborates this Purānic evidence of the flood; and (c) since the Kaushāmbi PGW can be related with the last stages of the PGW of Hastināpur, it is possible that the purānic tradition of the capital being shifted from Hastināpur to Kaushāṃbi is correct.

As against this, Shri Amerendra Nath feels that the archaeological evidence as quoted by Prof. Lal holds good only if we accept his stands that the Mahābhārata war was fought in the tenth century B.C. Since, according to another view, particularly of K.C. Varma and S.B. Roy, the date of the war falls in the 15th-14th century B.C. it is possible that the archaeological culture belonging to this period is represented by the Late Harappa+Ochre Colour Pottery complex whose remains have been found on several sites in the Indo-Gangetic divide, including Kurukṣhētra and Hastināpur. He feels that the methodology adopted by Prof. Lal—trying to find out the remains of a common culture—complex at most of the sites associated with the Mahābhārata story to determine the culture of the Mahābhārata period—is itself questionable. Why should we think that there has been a single archaeological culture all over the region in which the drama of Mahābhārata was played ?

III.1.4 *Upendra Thakur : The Controversy Concluded*

Beside the above mentioned and other veterians, those who participated in the seminar of Vedic scholars and Astronomers organised by the Vidur Sewa Aśram, Bijnor (U.P.) leaves no doubt about the historicity of the Mahābhārata war. Prof. Upendra Thakur says :

"the recent controversy about the historicity of Mahābhārata war is in fact, heartening for a historian in particular and the history-loving public in general. It is true that the Mahābhārata war tradition is deeply entrenched in the minds of the Indians but to regard it as a proof of the historicity of this tradition, as R.C. Majumdar does, is simply unwarranted. Common beliefs and historical facts are quite different things. The only stand at the present moment that we can take is that the Bhārata war needs further historical proof to be regarded as a historical fact".[6] In the concern of further research, Prof. Thakur encouraged the author through his letter dated 17.4.81 by saying : "I am really grateful to you for having sent the off-print of your paper 'Historical Dates of Kaliyuga Events' which is really very informative and thought-provoking. As in the 'Date of the Mahābhārata War', so in this article you have broken new grounds and thrown light on some of the obscure problems hitherto unnoticed by scholars. Your painstaking research, I am sure will soon attract the notice of Indologists here and abroad".

III. 2 MAHĀBHĀRATA EPIC WAR : THE CONTROVERSY OF TIME BRACKET

III.2.1 *Myth originated not earlier than Sixth century B.C.*

D.C. Sircar's contention about the date can be summarised as follows : "The Kathāsariṭsāgara mentions that Udayana, king of Kaushāmbi, also a contemporary of the Buddha, was the fifth or sixth in lineal succession to Parīkshit, a personality mentioned in the Mahābhārata. But the Purānic lists mention that Udayana was the twenty-five in descent from Parīkshit. This raises the problem of reconciling ten generations of priests with twenty-five generations of kings. The story in its final form portrays the war between the Kauravas and Pāṇḍavas—a struggle between the Kurus and Pāñchalas. In the latter event the Parīkshit tradition is unreliable and apparently introduced at a later date. Again, Dhṛtarāstra and Parīkshit find a place in the latter Vedic literature while the main dramatis personae Yuḍdhisthira and his brothers, are totally ignored. This seems to be a factor to be reckoned within dating the epic. Further, some hold

the view that the Mahābhārata war took place in the ninth-tenth century B.C. Here again it is impossible to accept this for want of any reference to the war in the later Vedic literature. In this context it is rather impossible to understand why Ārya Bhaṭṭa, Vārāhamihira (authors of the Gupta period) as also the compilers of the historical section of the purānas assign very early date, between the second to the fourth millennia B.C.

Further, Bhagadatta, king of Prāgajyotiṣh—identified with modern Assam—was an important figure in the Mahābhārata. Bhagadatta does not find a place in the latter Vedic literature. In the Aṣṭādhyāyī of Pāṇini also we find no mention of the people of the east and south in the fifth century B.C. Hence, if we are to accept that Bhagadatta took part in the Mahābhārata war in Haryana region he could have done so not earlier than the rise of Nandas in the fourth century B.C. Incidentally, this also would prove that the Mahābhārata story could not have developed prior to fourth century B.C.

Finally, a word about the strength of the fighting armies. An akṣauhiṇī consisted of 21,870 war chariots; 21,870 elephants; 65,610 horsemen and 109,350 foot-soldiers. This would involve about forty lakhs of fightingmen. To say that a close fighting ensued involving seven to eleven akṣauhiṇīs of warriors in a single battlefield is a physical impossibility not only in days of yore but even today. This appears to be a hyperbolic poetic fancy. Sircar is of emphatic opinion that, "all stories of earlier digvijayas and empire building described in the epics and the purānas have to be regarded as belonging to the domain of mythology and folklore and not history. But all the same, in spite of the above, Devakīputra Kṛṣṇa possibly a historical figure for he is mentioned in the Chāndogya Upniṣhad.[7]

Sankalia's contentions are as follows: "Several schools of scholars advocate divergent dates, viz., 3100 B.C., 1400 B.C. and 900 B.C., for the Mahābhārata war. They are primarily scholars of 'Saṇskrit literature and arm-chair historians'. Before accepting any of these dates one has to weigh the implications arising out of this.

We have to assume that during this time fairly large sized kingdoms existed in the present day Haryana, Punjab, Sind, Gujrat, Saurashtra, Kutch, Uttar Pradesh, Bihar, Assam, and Kashmir. And also, that in all these areas a fairly well developed culture and civilization prevailed. It is also imperative that the rulers here had a standing army of the major corps; their numerical strength not were being taken into account. But there is no foundations for these assumptions; for making the discoveries of the Indus Valley civilization have pushed back the history of India to the third-fourth millennia B.C. and about the people, Sankalia observes : "A people who had given the whole western and north-western India a well planned and administered city-civilization, and that too for well-nigh tahousand years, used comparatively simple tools and weapons of stone and copper-bronze. The most prolific of their weapons was a terracotta sling-ball found stored in huge quantities behind a defensive mud-brick wall at Mohenjodaro and arrow-heads of copper, bronze and bone, possibly tipped with poison". Spearheads and Axes of the Harappans were devoid of sockets and had to leashed to handles, probably of wood. The professor is sceptical about the efficacy of these weapons, particularly in close combat –dvaṇda-yuddha—for these will buckle on impact. If the date of the Mahābhārata war is accepted as 3000 B.C., or 1400 B.C. even, then it would follow that the epic heroes like Bhima, Arjuna, Karna and others fought with insignificant looking microliths, small maceheads, sling balls of stone and terracotta (not more than three inches in diameter and 12 ounces in weight). For about fifteen hundred years from Peshawar in the north to Braoch in the south, and Karanchi in the west to Delhi in the east, these types of weapons are common. But the difficulty in accepting these futile weapons is quite apparent. Further, the Mahābhārata refers to weapons made of iron which incidentally were not in regular use before the sixth century B.C. and definitely unknown before eleven hundred B.C.[8]

III.2. 2. *Reality Happened not Later than 3000 B.C.*

Most of the scholars who believe in the authority of traditions given in purānas and pañchāngas, have the opinion that Kaliyuga

began with 3102 B.C. and the Mahābhārata war took place 36-37 years before it in 3138-39 B.C. They do not give any importance to views of archaeologists. As this informed by Dr. B.V. Raman to me in his letter dated 30.8.1980 that I do not attach much importance to the views of scholars like Sankalia, regarding the age of our epics and Vedas etc. The arguments of traditional scholars viz., D.S. Triveda, Ach. Udayavira Shastri, B.V. Raman, Kota Venkatachelam, R.K. Siddhantashastri, K.S. Sriniwas Raghavan and etc. are :[9]

(i) Megasthenes is unreliable;

(ii) the identification of Sandrocottos with Chandragupta Maurya is wrong, it should be with Samudragupta or his father Chandragupta I of Gupta dynasty;

(iii) the identification of Palibothra with Pataliputra is wrong, since according to Greek writers, the former was 200 miles above the confluence of Ganga and Yamuna rivers;

(iv) that though Megasthenes described Sri Kṛṣṇa as a descendent of Dionysus, there is no proof for this;

(v) that the Śaka-kāla mentioned by Varāhāmihira, in his date for Yuddhisthira is to be equated either with the nirvana of Buddha or Cyrus the Great, of Iran (and this would support the date 3102 B.C.);

(vi) that the Ashokan rock edict XIII, does not mention five contemporary Greek (Yavana) kings, instead they are the names of countries or cities;

(vii) the arguments derived from the palaeography of the Armaic, Kharoṣthi and Bṛāhmi inscriptions are very doubtful;

(viii) that according to Greek writers–Arrian, Pliny and others, there were 153/4 kings between Heracles and Chandragupta Maurya, and they ruled 6451 years, dating Chandragupta to 325 B.C. (this is the stand of C.T. Kenghe; Dr. Fateh Singh), but Udayavira Shastri, Smt. Madalasa (i.e. Inder Narayana Dwivedi), D.S. Triveda assign Chandragupta Maurya to 1536 B.C.;

(ix) Since Kaliyuga began in 3102 B.C., the war took place either then or 36 years earlier. This is supported by Aryabhatta and Aihole inscription;

(x) The archaeologists have not been able to find any object associated with Sri Rāma and Sri Kṛṣṇa, and hence it is probable that they lived before the Indus Valley Civilization (now dated 3000-2000 B.C.);

(xi) Scholars like C.T. Kenghe, following C.V. Vaidya, declare the dynastic lists of Purānas unreliable. On the other hand, Udayavira Shastri, Smt. Madalasa (i.e. Indra Narayana Dwivedi) swear by purānic lists, and so does D.S. Triveda;

(xii) D.S. Triveda (Ind. Chronology, p. 29) admits that the 'Piyadasi inscriptions' must be associated with Ashoka Maurya not with the Gupta dynasty, as is maintained by Krishnamachariar.

In this thesis, because we are concentrated, particularly on the post-war chronology of north-India from the birth of Parīkshit II up to the coronation of Ashoka Maurya, therefore, we have to see that in what manner the traditional scholars tackled the problem, i.e. to fill the gap of 2800 years lies between 3138 B.C., the date of Bhārata war and the coronation of Chandragupta Maurya in *c.* 324 B.C.

III.2.2.1. The attempt of R.K. Bhattacharya Siddantashastri

Prof. Bhattacharya denies that the Bhāgwata purāna 12.2.21, means that was an interval of 1115 years between Parīkshit and Nanda. According to him, the last portion of the verse can be properly translated as [1000 (sahasra)+1000 (dashottaram)+500 (śataṃ pañcha)=] 2500 years the interval between the Bhārata war in 3136 B.C. and the coronation of Chandragupta Maurya in 324 B.C. He summarises the intervening period's chronology as follows:[10]

(i) the date of the Bhārata war ;	3136 B.C.
(ii) Yuddhisthira ruled	3136-3101 B.C.

(iii)	Parīkshit ruled	3101-3041 B.C.
(iv)	35 Kurus	3041-2020 ,,
(v)	32 Bārhadṛathas	2020-996 ,,
(vi)	6 Pṛadyōtas	996-848 ,,
(vii)	11 Śaśunāgas	848-485 ,,
(ix)	Mahāpadma Nanda	485-422 ,,
(x)	8 successors of Mahāpadma Nanda	422-324 ,,
(xi)	coronation of Chandragupta Maurya	324 ,,

III.2.2.2. Attempt of Pt. Kota Venkatachelam

Pt. Kota Venkatachelam, the another traditional scholar, on the other hand, raised the epoch of the coronation of the Chandragupta Maurya from 324 B.C. to the 1534 B.C. by a push-back factor of 1210 years and thus there is no need to add the 35 Kuru kings for the period of (3041-2020 B.C.=) 1021 years in between the end of Parīkshit and the beginning of Bārhadṛathas over Magadha. His chronological reconstructions are as under :[11]

(i)	coronation of Somādhi over Magadha	3138 B.C.
(ii)	22 Bārhadṛatha kings	3138-2132 ,,
(iii)	5 Pṛadyōta kings	2132-1994 ,,
(iv)	10 Śaśunāga kings	1994-1634 ,,
(v)	9 Nanda kings	1634-1534 ,,
(vi)	12 Maurya kings	1534-1218 ,,
(vii)	10 Śuṇga kings	1218-918 ,,
(viii)	4 Kaṇva kings	918-833 ,,
(ix)	32 Āndhra kings	833-327 ,,
(x)	coronation of Chandragupta I of Guptas	327 ,,

thus Pt. Kota Venkatachelam arrives at the conclusion that the Magadhan contemporary of Alexander was the Imperial Gupta dynasty king Chandragupta I rather than that of the Chandragupta

Maurya. Most of the traditional scholars who believe in the 3138/39 B.C. date for the Bhārata war, more or less endorse the views of Pt. Kota Venkatachelam.

III.2.3. *Parīkshit born in 1350/51 B.C., the 12th Divine Night of Mahābharata war*

K.C. Varma, S.B. Roy, Dr. R.P. Poddar, A.K. Chatterji, G.W. Kaveeswar, W.V. Bhagwata and also myself belongs to the middle time bracket group of 15th-14th century B.C. for the date of Mahābhārata war. According to my scientific investigation into the ancient Hindu calendar, briefly discussed in Ch. I & II of this work, Dwāpara yuga ended and Kaliyuga began with 1308 B.C. and Mahābhārata war took place 36 years before the beginning of Kaliyuga i.e. in (1308 B.C.-36 years=) 1344 B.C. But on the basis of Saptarishi calendar, the war began with the 76th year of Maghā nakshatra of Saptarishi samvata i.e. in [2448 B.C.+(1010+76)=] 1362 B.C. It means the Mahābhārata war had the original duration of (1362 B.C.-1344 B.C.=) 18 years (i.e. 18 divine days) rather than of 18 human days. In a 18 human days war-theory, the fear of Dr. D.C. Sircar, 'that is to say that a close fight ensued involving seven to eleven akṣauhiṇis of warriors (i.e. 40 lakhs of fightingmen) in a single battle field is a physical impossibility not only in days of yore but even today' is genuine. But 18 years war-theory does not face such a problem. In 18 years war-theory, Parīkshit II born in the divine night (i.e. winter season) of 12th divine day i.e. 12th year of the war in (1362 B.C.+12 years=) 1350/1351 B.C. In this thesis, we have fixed the coronation date of Mahāpadmananda, the last ruler of the Nanda dynasty, in 336 B.C. Thus Purānic statement : 'that there exist an interval of 1015 years between the birth of Parīkshit II and the coronation of Mahāpadmananda' is true. Traditional scholars e.g. K. Sriniwasa Raghavan, fixed the exact date i.e. Friday, 22 November, Mārgashīras month for the beginning of Mahābhārata war. If this date was the equivalent to our present day November of the tropical calendar then it would fall during the beginning of the winter season. When we apply Denton-Karlen's 6°C global temperature fluctuation plot then we know that the period of 1362-1344 B.C.

denotes the peak-point of a little ice-age i.e. the coldest weather in which there is no possibility of a big-war during the winter season i.e. the night in the divine-day reckoning. In 18 divine days war-theory, we have the sufficient climatological clue that why the war was strictly forbidden during the night (divine).

Among later Saṇskrit chroniclers, the Mahābhārata war chronology was shifted by a factor of (1362-1339/38 B.C.=) 23/24 years due to the two separate causes : (i) 18 years shift was taken place due to the conversion of 18 years ancient genuine war data into latter period's modified 18-days war theory; (ii) 6 years shift in the Chatur-yuga calendar itself when the reference era of Hindus and Russians (equivalent to the 'creation era of Constantinople' began with 5508 B.C.) was being replaced by the 'era of Alexandria' (began with 5502 B.C.).[12]

The period of 723 years given in Maṭṣya Purāna for Bārhadṛatha dynasty was actually the period intervening between the beginning of Mahābhārata war and the end of Bārhadṛatha dynasty in Magadha i.e. (1362 B.C.+723 years=) 639 B.C. It seems that purānic chroniclers were somehow certain about the epoch of the end of Bārhadṛathas in precisely 639 B.C. because when the war-chronology shifted from 1362 B.C. to 1339 B.C. (an epoch of 36 years before the beginning of Kaliyuga in 1302 B.C.) then some of the manuscripts of Maṭṣya Purāna assign only 700 years interval between the end of Mahābhārata war (1339 B.C.) and the end of Bārhadṛathas in Magadha (639 B.C).

Purānas enumerate a geneology of [138 years (Pṛadyōtas)+362 years (Sasunagas)=] 500 years for the post-Bārhadṛathas but pre-Nanda period whereas Buddhist figures give only 200 years for the same. Scholars prefer Buddhist figures because it is found nearer to the truth. But often purānic figures, for individual reigns, seems to be more genuine than the Buddhist and Jain figures. Therefore, in this work, we also try to analyse that how the purānic figures got inflated by an inflation factor of two and half times with reference to the Buddhist sources. It might be due to the fact that, in original, the interval between the end of the Dwāpara yuga and the beginning of

the Vikṛamāditya saṃvata i.e. the Kṛta saṃvata of inscriptions was the 1200 years that was in latter time inflated to 3000 years.

According to Buddhist and Jain sources, Pṛadyōtas never ruled, in Magadha, they had ruled, actually, in Avanti only. The Chanda-Pṛadyōta of Avanti was contemporary to Bimbasāra and Ajātshatru of Magadha, Prasenajit of Kośala, Udayana of Vaṭṣa (Koshāṃbi). Therefore, the Śiśunāga, who uprooted the successors of Pṛadyōtas of Avanti, i.e. of much later origin than Pṛadyōta, how could become the predecessor of Bimbasāra according to purānas. Probably, Śiśu-nāga or Śiśunāka who uprooted the Pṛadyōtas in Avanti established his son at Varanasi and finally captured the throne of Magadha, in course of his victories, might have misunderstood with that of the Śunaka or Śunīka, Pulaka or Pulīka, the predecessor of Pṛadyōtas, who killed the last Bārhadṛatha king Repuñjaya. Probably, originally purānic compilers had two parallel lists—(i) list of Avanti containing Pṛadyōtas and subsequently Śiśunāga and Kākāverṇa and then (ii) lists of Magadha kings beginning with Kshemadharma and ending with Mahanandi; which got mixed as a series-list due to the ignorance or copiest mistake in the later period. The present effort may, perhaps, enough to answer the comments of Mr. Pargiter quoted in his A.I.H.T, p. 183 fn. 3 as follows :

> "Mr. Jayaswal fixes the battle in 1424 B.C. and other Indian writers favour similar early dates, all working on the above chronological statements in the Purānas (which are discrepant without checking their figures by comparison with reliable data from dynasties elsewhere. Such a comparison shows that their calculations produce result contrary to general experience : thus his date makes the medium average of 31 reigns (16 Bārhadṛa-thas+5 Pṛadyōtas+10 Śaśunāgas) from the battle to Mahāpadma about 33 years, an incredible length. Another consequence of such dating is to prolong also the ages before the battle; and to put back the antiquity of any event is to weaken the trustworthi-ness of tradition about it."

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4

300 Years Interval between Parikshit II and Janamejaya III

IV. 1. REVELATIONS OF THE FIRST STANZA OF THE MAHĀBHĀRATA EPIC

P.R. Chidambara Iyer[1] suggests that the fourth quarter of the

नारायणं नमस्कृत्य, नरं चैव नरोत्तमम् ।
देवीं सरस्वतीं चैव, ततो जयम् उदीरयेत् ॥

(*Ādi Parva*, *Mbh.* epic, 1/1)

stanza was 'Tato Jayam Udiraye' (and not 'Udīrayēt') which meant 'I issue the work 'Jaya'.' The expression 'Jaym Udiraye' is considered to be a chronogram yielding the figure '128518' in Katapayādi notation as the 'Kali Sāvana day' of the occurrence, which gives 351 years, 10 months and 18 days. This is equivalent to 'Tritīya' of the dark-fortnight (18th day) of the month of Māgha of the 352nd year of the Kaliyuga. It gives (1308/1302 B.C.+351 years=) 957/951 B.C. as the year in which the epic was narrated to the Kuru king Janamejaya III in the form of 'Jaya'. Whereas Parīkshit II born in 1351/1338 B.C. (around 36 years before the beginning of Kaliyuga) and died at the age of 60/96 years[2] in (1351 B.C.+60/96 years=) 1291/1255 B.C. or in (1338 B.C.+60/96 years=) 1279/1242 B.C.

IV.2. REVELATIONS OF THE DYNASTIC TITLES OF VYĀSA RISHIS

During Mahābhārata war, the proper noun name of the Vyāsa Rishi was mentioned as 'Kṛṣṇa Dvaipāyana'. The word 'Dvaipāyana' may actually denote the dynastic number of the Rishi in the form 'Dvai+Pāyana' (द्वै+पायन) second number of in the list of Vyāsa rishis. Whereas the actual narrator of the epic 'Jaya' to the Kuru king Janamejaya III was known as the Rishi Vaishaṃpāyana. The word 'Vaishaṃpāyana' is again actually denote the dynastic number of the Rishi, contemporary to the Janamejaya III, in the form of 'Viṃsham +Pāyana' (विंशम+पायन) which is equal to denote 'Twentieth number of the list of Vyāsa Rishis. Therefore between the Vyāsa II (contemporary to Mbh. war) and Vyāsa XX, there existed a generation gap of 18 numbers. On taking 20 years average per generation, we can calculate the gap, between Vyāsa II and Vyāsa XX of (18×20=) 360 years.

IV. 3. REVELATIONS OF THE KALAHAṆA'S RĀJATARAṆGINĪ

Mulla Ahmad's History of Kashmir written in Persian language[3] gives the list of the lost 35 kings of Kashmir from no. 5-39 of the list given in Kalaaṇa's Rājahtaraṇginī 1/83, and tells us that Kuru king Parīkshit II killed Kashmirian king Gonanda II (4th in R.T.) in a battle. As Gonanda II left no heir, Parīkshit II (5th in R.T.) incorporated Kashmir into his empire. He ruled over Kashmir from Hastināpur for 42 years. At the time of his death, Parīkshit II gave Kashmir to his second son 'Harnadeva' (6th in R.T.). 23 kings of the Pāṇḍava dynasty and 12 other kings ruled up to 1324 Kashmirābda (1942-1324=) 618 B.C. But in Purānas, Parīkshit II had four sons --Janamejaya III, Ugrasena, Shrutasena and Bhimasena (Vish. Pur. 4/21/2; Bhāg. Pur. 9/22/35). It means, according to Purānas, none of the Parīkshit II's sons was named as 'Harnadeva'. On the other hand, Purānic 'Bhīmasēna', a brother of Janamejaya III, was actually found in Mulla's Hist. of Kashmir kings list, but he was not placed immediately after the Parīkshit II as the 6th ruler but was placed as the 25th ruler. If Mulla's History as well as the Purānic accounts, both were correct, then according to Mulla's History, there ruled (25-6=) 19

kings between the Parīkshit II and Bhīmasēna, the brother of Janamejaya III, over Kashmir kingdom from Hastinapur. They all belong to Pāṇḍava dynasty. It gives certainly a definite clue that our Purānic Kuru king list actually missed 19 Pāṇḍava king names (i.e. a duration of 19 kings × 20 years average=380 years) between Parīkshit II and Janamejaya III.

IV.4. REVELATIONS OF THE MAHĀBHĀRATA ADI-PARVA 45/16

इदं वर्ष सहस्त्राय राज्यं कुरुकुलागतम् ।
बाल एवाभिजातोऽसि सर्वंभूतानुपालकः ॥

(*Mbh. epic; Ādiparvan*, Crt. ed. Vol. I, p. 202)

It states categorically, that when the epic was narrated to Janamejaya III, by Vaishaṃpāyana, the Kuru family had been reigning at Hastināpur or over Kuru country for a thousand years and Janamejaya III was so young that the story about the death of his father has to be related to him. According to my work entitled 'Chronology of Kashmir history (Annexure III) p. 15 (24) sec. IV', Kuru era actually started from 1942 B.C. based on Jain tradition of Yuḍdhisthira era. Therefore, 1000 years of Kuru era may fall, in the reign of Janamejaya III, in (1942 B.C.+1000 years=) 942 B.C. i.e. 366th year of Kaliyuga. All these four pieces of evidence clearly shows that Janamejaya III was not actually the son of Parīkshit II. On the basis of Mahābhārata Ādiparvan, Crt. ed., Vol. I, pp. 202, ver. 45/23, it is stated that Parīkshit II died at the age of 60 years whereas Mahābhārata I.49.17 states that Parīkshit II ruled for 60 years i.e. died at the age of 96 years. In both the cases, the statement: 'Janamejaya III was so young that the story about the death of his father has to be related to him' is not correct. On the basis of the present day knowledge of the biological progeny, a person who dies at the age of 60 years or 96 years can not leave his eldest (among the four) son so young that the story about the death of his father has to be related to him by a third person. It is in itself a clear evidence that there should must be a long gap between the so-called father (Parīkshit II) and the son (Janamejaya III).

IV.5. REVELATIONS FROM THE ARCHAEOLOGY

300 years gap between Parīkshit II and Janamejaya III, fixes the date of Parīkshit II during 1302-1242 B.C. whereas of Nichaksu, who shifted the capital to Kaushāṃbi after flood, during 906-888 B.C. Archaeologically, the former should belong to Late Harappa-Ochre Colour Pottery complex whose remains have been found on several sites in the Indo-Gangetic divide, including Kurukshētra and Hastināpur, while the latter to P.G.W. culture (1100-500 B.C.). Parīkshit II's epoch (1302-1242 B.C.) clearly lied during a little ice-age period (Eddy's Egyptian minimum of Solar activity : 1400-1200 B.C.) after which a huge flood event occurred which engulfed not only the Gangetic doab as an after effect of the little ice-age period, but raised the sea-level so high that the Dwārikā city belonging to the LHC culture was submerged just after the pass-away of Kṛṣṇa according to the tradition as well as the recent excavations done by S.R. Rao. Recent sedimentological and scaning electron microscope analyses[4] on OCP sediments suggests that originally these were derived from glacial environments which were subsequently redeposited by floods. According to tradition, this flood occurred around 1308/1302 B.C. about one week after the pass-away of lord Kṛṣṇa i.e. also the beginning epoch of the Kaliyuga. According to archaeologists, None of OCP sediments has the character of normal habitational deposit but a deposit of the variety of materials ranging from 2600-1100 B.C. But recently, Prof. R.C. Gaur found a site of the normal habitational deposit of OCP. OCP-LHC complex culture alongwith the Copper-hoard items really belonged to the advanced Aryan culture of Mahābhārata period because it is a city culture and possessed good quality of copper and bronze ammunition much more better than of Harappans having up to 7% of Arsenic alloying in the metallurgy of arms. The copper-hoard item named as 'anthropomorph' is a good example of arms and may resemble the weapon named as 'Nārācha i.e. the weapon having the shape of human being. As regard the use of Iron weapons, epic-heros regarded them as unclean items due to their blackness and also iron-weapons were the rare-items and kept in safe custody to use in last hours to kill the

enemy, otherwise epic-heros were busy, most of the time, in showing the art of the weapon-operation to the enemy hero. The use of Iron weapon always find a special mention in the epic.

As regard the flood destruction of Hastināpur and the shifting of the capital from Hastināpur to Kaushāṃbi in the reign of king Nichakshu (906-888 B.C.), I agree with Prof. B.B. Lal's theory. P.G.W. at Hastināpur might be destroyed in flood in *c.* 900 B.C. and after 200/300 years N.B.P. culture began there.

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5

Dynastic Lists of North Indian Kings from Parikshit's Birth upto the End of Barhadrathas of Magadha

V.1 KINGS LIST OF THE KURU DYNASTY

Chapter IV of this work gives a definite clue that there is a clear gap of at least 300 years between Parīkshit II and Janamejaya III in the Purānic chronology. It would perhaps make it too difficult to give a clear idea about the complete kings-list of Kuru dynasty, if we have not already possessed, luckily, the lost Purānic kings-list of Pāṇḍava kings who ruled over Kashmir from Hastināpur after Parīkshit II, given in Mulla's Hist. of Kashmir in order to fill the gap from the 5th to 39th kings missing in Rājataraṇginī 1/83.

Is the Kuru kings-list mystery solved by the lucky find of the kings-list missing also from the Rājataraṇginī ? Not a bit of it ! That is then the trouble really started. Because, a theory after all stays for its confirmation on some other reliable cross-check sources. And for cross-check, again we have to search out for clues in Purānas alone because here we have no other sources viz., of Jain or Buddhists, of coins or inscriptions etc.

For cross-check, we have possessed at least two reliable Purānic statements collected by Mr. F.E. Pargiter in his famous book 'The Purāna Text of the Dynasties of Kali Age' as under :

PṚADYOTAS

'When the Bārhadṛathas, Vītihōtras and Avantis have passed away, Pulaka (Vā Munīka Vs. Śunīka. Bd, Bh Śunaka) will kill his master and anoint his own son Pṛadyōta by force in the very sight of the Kshatriyas...'

(D.K.A., p. 68)

EARLY CONTEMPORARY DYNASTIES

'Contemporaneousness with these aforesaid kings there will be other kings; all these following kings will endure an equal time namely, 24 Aikṣvākus, 27 Pāñchālas, 24 kings of Kāshi, 28 Haihayas, 32 Kalingas, 25 Ashmakas, 36 Kurus, 28 Maithilas, 23 Śurasēnas and 20 Vītihōtras. All these kings will endure the same tiıne.'

(D.K.A., p. 69)

The first statement (D.K.A., p. 68) is the compilation of passages, given in the Purānas, tells us that after the Bārhadṛathas of Magadha and Vītihōtras of Avanti ceased to reign, Pradyote was made king by his father who killed his lord Repuñjaya, the last Bārhadṛatha king. If the first statement of D.K.A., p. 68 is really true, then the last Vītihōtra king of Avanti (or of elsewhere as may be the case) should be the near contemporary to the last Bārhadṛatha king Rapuñjaya.

Now take into account the second statement 'Early Contemporary Dynasties' (D.K.A., p. 69) which tells about the 'contemporaneous ness with these aforesaid kings there will be other kings; all these following kings will endure an equal time namely...and 20 Vītihōtra. Scholars thought that this statement was related with the end of Śaśunāga dynasty and the beginning of Nanda dynasty. The very basis of this view among scholars lies in the analysis made by Pargiter D.K.A. p. 23 :

'Etaih sārdham means contemporary with the Bārhadrathas and their successors, the Pṛadyōtas and Śiśunāgas, for none of these are mentioned here, but the Aikṣvākus and the Kurus (who are probably the Pauravas) are included, whose dynasties have been fully set out ante. The king Mahāpadma Nanda is called 'destroyer of all the Ksatriyas' and 'monarch of the whole earth which was under his sole sway'—which terms imply that he overthrew all the kingdoms mentioned in this list, so that all subsequent dynasties except the Kānvāyanas were Sudras (see Nandas II 2-6). This list of contemporary dynasties means therefore all the old Ksatriya dynasties, which reigned from the time of the great battle till they and the Śiśunāgas in Magadha were swept away by the Nandas, whose dynasty follows the list.'

But truly speaking, it was not the actual case. Though Pargiter indeed made a very good analysis of the statement but he still missed a number of serious loop-holes e.g.

(i) The 'D.K.A. p. 69' statement also contain '... and 20 Vītihōtras' and from the first statement (D.K.A. p. 68) we have already informed that the last Vītihōtra king was the near contemporary to the last Bārhadṛatha king Repuñjaya because both were passed away in the time of Pṛadyōta's father. Therefore, we can not equate, on the basis of Purānic statements, the last (i.e. 20th) Vītihōtra king 'as contemporary king to the Mahāpadma Nanda as Pargiter did. In order to avoid this paradox, Pargiter preferred the omission of Vītihōtras from the list by saying : 'It is said that Vītihōtras had passed away before the Pṛadōytas began, D.K.A. pp. 18, 68. If so they should be omitted; yet the reckoning here would not be materially modified (A.I.H.T. p. 181 fn. 3), but in my opinion the reckoning should must be materially modified.

(ii) According to Pargiter's analysis, this list of contemporary dynasties means therefore, all the old Ksatriya dynasties, which reigned from the time of the great battle till they and the Śiśunāgas in Magadha were swept away by Nandas. On the other hand, Pargiter

on the basis of chronological statements of Purānas, gave (723+52+163=) 938 years duration between the time of great battle (i.e. the birth of Parīkshit II) and the coronation of Mahāpadma Nanda. If we equate 938 years duration with the aforesaid number of kings of various dynasties given in the 'Early contemporary dynasties' list then the minimum average years per king comes to be (938/36 Kurus=) 26 years whereas maximum average would be more absurd as [938/20 (Vītihōtras)=] 47 years. These averages are still difficult to be shallowed down by the modern historians. Therefore, Pargiter discarded all the Purānic chronological statements (A.I.H.T. p. 182 fn. 3) including the early contemporary dynasties (D.K.A. p. 69) and he only relied on the Purānic 'Kings list' and approx. '18 years per king average' theory.

(iii) This statement (D.K.A., p. 69) also does not contain a definite clue that Mahāpaḍma Nanda really uprooted all these dynasties at a time immediately after their aforesaid number of kings rule ended.

The above mentioned three pieces of evidence corroborates that 'Etaih sārdham' really means 'contemporary with the end of Bārhadṛathas' and mentioned dynasties might continue (after their aforesaid number of kings elapsed at the time of the end of Bārhadṛathas and Vītihōtras) further up to the reign of Śaśunāgas and Mahāpadma Nanda.

Now come to the actual point of the Kuru kings-list. According to the synthesis of both the statements : not only the 20th Vītihōtra king but also 36th Kuru king were the near contemporary to the last Bārhadṛatha king Repuñjaya. This analysis now make it some what simpler to cross-check the actual number of missing kings, from Purānic Kuru kings-list between Parīkshit II and Janamejaya III, fortunately found in Mulla's History. But one thing more ! Which is to be considered before any final decision about the complete Kuru kings-list. Political situation of the India during the reign of King Janamejaya III ? It is the most important point in order to give any final decision concerning the kings-list of Kurus and other important dynasties.

Probably, a little before the time of Janamejaya III's reign (one or two or maximum three generations before ?) Kuru dynasty began to loose gradually his territorial sovereignty (i.e. as a single sovereign power) over whole north India which was actually achieved in the form of glorious victory in the battle of Mahābhārata.[1] Bārhadṛathas in Magadha, Aikśvākus in Ayōdhyā, Nāga-kings in Kashmir and Pāñchālas, kings of Kāshi, Haihayas, Kalingas, Aśmakas, Maithilas, Śūrasenas and Vītihōtras might gradually deny the sovereignty of Kurus over them and gradually declared their own independent authority over the respective regions. This might be the principal cause for the court-bards (Sūtas) and Rishi Vaisampāyana (Vyāsa XX) to narrate the old glorious victory tale i.e. the epic 'Jaya of 8800 verses' fought by the remote ancestors of Janamejaya III (almost 350 years old glorious deed) in order to re-gain the total sovereignty over the rebels. Janamejaya III was also told about the murder of Parīkshit planned by a Nāga king 'Takshaka',[2] probably a remote past king of Takshilā, contemporary to Parīkshit II. These stories really gave the required 'warm-up' to the king Janamejaya III and he immediately attacked over Takshilā,[3] ruled at that time by the Nāga-race, killed the Nāga king Khimendra (24th of Kashmir Kings list) gave the throne of Kashmir to his brother Bhīmasena (25th King).

Probably Nāga-race captured the throne of Kashmir in the reign of Pāṇḍava king Sulkandeva (21st of Kash. list) because 'Deva' title of the Pāṇḍava (i.e. the sons of Pāṇdu-deva) kings started with 'Harnadeva' (6th), immediately after the reign of Parīkshit II, and running almost continuously up to the Sulkandeva (21st). Three Nāga kings—Sinādiṭya (22nd), Mangalāditya (23rd) and Khimendra (24th)—might rule over Kashmir for a short duration. Therefore in all probability, Janamejaya III was the immediate descendent, the son, of the king Sulkandeva (21st of Kashmir kings-list of Pāṇḍava race).

After all, Janamejaya III was not proved himself so much powerful, as was considered by his court-bards (Sūtas) and Rishi Vaiśampāyana to become the sovereign authority over whole of India. Consequently, he could not be able to perform the 'Aśwamedha'

sacrifice due to some differences (religious or political ?) with Bṛahmin priests.[4] After making such a long discussion concerning the clues, we are now in a better position to give, provisionally, a Kuru kings-list with some certainty as follows :

TABLE V

KURU KINGS-LIST

1. Parīkṣhit II	13. Chandradeva	25. Śuchidratha
2. Harnadeva	14. Ânandadeva	26. Vṛṣṇimat
3. Rāmadeva	15. Dṛupadadeva	27. Suṣeṇa
4. Vyāsadeva	16. Harnāmdeva	28. Sunītha
5. Dṛaunadeva	17. Sulkandeva	29. Ruca
6. Siṃhadeva	18. Janamejaya III	30. Nṛcakṣus
7. Gopāladeva	19. Śatānīka I	31. Sukhībala
8. Vijaynaṇda	20. Aśwamedhadatta	32. Pariplava
9. Sukhadeva	21. Adhisīmakṛṣṇa	33. Sunaya
10. Rāmandeva	22. Nicakṣhu	34. Medhāvin
11. Saṇdhiman	23. Uṣṇa	35. Nṛpañjaya
12. Marahandeva & Kamandeva	24. Chitraratha	36. Dhṛuva

The 36th Kuru king 'Dhṛuva' (or a generation on either side) might be the near contemporary to the last Bārhadṛatha king Repuñjaya. This analysis of Kuru kings-list reveals that the actual number of kings from Parīkshit II up to the end of Bārhadṛathas was 36 rather than 20 what is traditionally interpreted, and it gives a clear missing of atleast (36-20=) 16 kings i.e. a period of approximately (16×20) 320 years.

V.2. KINGS-LIST OF BĀRHADṚATHA DYNASTY OF MAGADHA

Pargiter says, in D.K.A. p. 13, 'This dynasty was founded by Bṛahadratha I, son of Vasu Caidyōparichara, and he and his 9

successors reign down to the great battle (see *JRAS*, 1910, pp. 11, 22, 29). The following two verses from Mbh. epic tell about the early Bārhadṛatha kings contemporary to Mahābhārata war period :

एवमुक्तवा जरासन्धः सहदेवाभिषेचनम् ।
आज्ञापयत्तदा राजा युयुत्सुर्भीमकर्मभिः ।। 2.20.29

सहदेवो नृणां देवं बासुदेवमुपस्थितः ।। 2.22.40
भयातीय ततस्तस्मैः कृष्णो दत्तवाभयं तदा ।
अभ्यषिञ्चत् तत्रैव जरासन्धत्मजं तदा ।। 2.22.41

(*Mbh. epic*, Crt. ed., Vol. II, pp. 114-123, Sabhāpar)

Jarāsaṇdha (son of Bṛahadratha II) was the 9th king who killed in a duel, at Magadha, with Bhīmasena before the Bhārata battle and his son Sahadeva was made the king (i.e. 10th) by lord Kṛṣṇa. When the Bhārata battle took place and Sahadeva was slain, his heir Somādhi became king in Girivṛaja (DKA, p. 67). Purānas say that the birth of Parīkshit II and the coronation of Somādhi (11th king of Magadha) was the contemporary event and both were taken place in 1351/1338 B.C. according to my calculation. Therefore, Somādhi might be the contemporary to Duryōdhana and afterwards for some times to the Yuḍdhisthira also. Great Battle ended in 1344/1339 B.C. Few months after the battle, Yuḍdisthira performed the Aśwamedha sacrifice i.e. to proclaim as the sovereign power of whole of India.[5] It might have resulted the removal of sovereignty from the Magadha king Somādhi/Meghasaṇdhi along with the others. Afterwards, Magadha was probably governed by the Kuru kings from Hastināpur for at least 16 generations–including Parīkshit II (5th of the Kashmir kings-list), up to the Harnāmdeva (20th of the Kashmir kings-list). Probably, during the reign of Harnāmdeva, Bārhadṛatha king Shṛutaṣravā/ Somādhi (12th of Purānic Magadha list) declared his sovereignty over Magadha. This plan makes the Bārhadṛatha king Nirāmitra (14th of Purāna-list) contemporary to Kuru king Janamejaya III and Senājit (17th of the Purāna-list) definitely to the Kuru king Adhisīmakṛṣṇa in whose reign Purānas were first recited. After Senājit, there is no problem of any synchronism analysis with the Bārhadṛatha kings-list of Magadha.

The chronological statements concerning the Bārhadṛathas are as under :

द्वात्रिंशच्च नृपा ह्येते भवितारो वृहद्रथाः ।
पूर्णं वर्ष सहस्त्रं वै तेषां राज्यं भविष्यति ।।

(Jayaswal, *JB& ORS*, Vol. IV, 1918, p. 26; also fn. 2)

षोडशैते नृपा भवितारो वृहद्रथाः ।
त्रयोविंशाधिकं तेषां राज्यं च शतसप्तकम् ।।

"पाठान्तर" त्रयोविंशाधिकम् तेषां राज्यं च शतसप्तकम् ।

(Jayaswal, *JB& ORS*, Vol. IV, 1918, p. 30 and fn. 14; Vol. III,1917 pp. 246-62)

Both these chronological statements might be true with respect to their own methodological because they count only Bārhadṛatha kings over Magadha therefore in doing so they had naturally omitted the 15 intervening Kuru kings who ruled over Magadha from Hastināpur. On the inclusion of these 15 Kuru kings period in Magadha list, the total number of kings from Bṛahadratha I up to the Repuñjaya over Magadha kingdcm in statement I becomes (32+15=) 47 kings reigned for full 1000 years. It gives a reasonable average of (1000/47=) 21.3 years per king.

Concerning the statement II i.e. '16 future kings reigned for 723 years', it consists actually the 16 future kings from the king Senājit who was taken as 'present' reigning king by the Purānas when they were first recited but the period 723 years was actually counted from the birth of Parīkṣhita II (or with the beginning of Mahābhārata war) rather than with the coronation event of Senājit. It creates a serious difference of at least (15 intervening Kuru kings +6 post-war Bārhadṛatha kings of Purānas=) 21 post-war kings. On the inclusion of 21 missing numbers in statement II, it becomes (21+16=) 37. It gives again a reasonable average of (723/37=) 19.5 years per king. Due to the grave missings in the Purānic Magadha-list of Bārhadṛatha dynasty, later Purānic compilers gave wildly higher regnal periods for the remaining kings of the list as follows :

TABLE VI

REGNAL YEARS OF POST-WAR BĀRHADṚATHAS IN PURĀNAS

S. No.	Data for 1000 years Total		Maṭṣya		Vāyu		Bṛahmāṇda		Lowest regnal years	
1.	Somādhi	58	Somavit	(50) 58	Somādhi	58	Somäpi	58	Somāpi	58
2.	Śrutaśravā	67	Shṛutaśravā	64	Shruta-śvara (67)	64	Shrutaśravā	67	Shrutaśrava	64
3.	Ayutāyu	36	Apratīpin	(26) 36	Ayutāyus (36)	26	Ayutāyu	26	Ayutāyu	26
4.	Niramitra	40	Nirmitra	40	Nirmitra	100	Nirmitra	100	Niramitra	40
5.	Sukṛitta	56	Surakṣha	56	Sukṛtta (58)	56	Sukṣhatra	56	Sukṛtta	56
6.	Bṛhaṭkarman	23	Bṛhaṭkarman	23	Bṛhaṭkarman	23	Bṛhaṭkarman	23	Bṛhaṭkarman	23
7.	Senājit	50	Syenajit	(50) 23	Senajit	23	Senajit	23	Senajit	23
8.	Śṛutañjaya	40	Shṛutañjaya	40	Śṛutañjaya	40	Śṛutañjaya	40	Śṛutañjaya	40
9.	Vibhu	28	Vibhu	28	Mahābala (Nṛpa)	35	Repuñjaya (Nṛpa)	35	Mahābala	28
10.	Shuchi	58	Śuchi	64	Śuchi	58	Śuchi	58	Śuchi	58
11.	Kṣhema	28	Kṣhema	28	Kṣhema	28	Kṣhema	28	Kṣhema	28
12.	Subrata	64	Anuvrata	64	Bhuvata (60)	64	Suvrata (28)	64	Suvrta	28
13.	Sunatra	35	Sunetra	(25) 35	Dharma- (5) netra	35	Dharmaneg	5	Sunetra	5
14.	Nivṛiti	58	Nirvṛiti	58	Nṛipati	58	Nṛipati	58	Nivṛiti	58
15.	Trinetra	28	Trinetra	28	Suvrata	38	Susrama	38	Trineṭa	28
16.	Dumaṭsena	58	Mahāsena	48	Dṛiḍhasena	58	Dṛiḍhasena	58	Dumaṭsena	48

S. No.	Data for 1000 years Total		Matsya		Vāya		Brahmāṇda		Lowest regnal years	
17.	Sumati	33	Mahīnetra	33	Sumati	33	Sumati	33	Sumati	33
18.	Achal	32	Achal	32	Suchal	22	X	(40) X	X	X
19.	Sunetra	40	X	X	Sunetra	40	Sunetra	40	X	X
20.	Satyajit	83	X	(80) X	Satyajit	83	Satyajit	83	X	X
21.	Vīrajit	35	X	X	Vīrajit	35	Vishwajit	(35) 25	X	X
22.	Ariñjaya	50	Repuñjaya	50	Ariñjaya	50	Ariñjaya	50	Repuñjaya	50
		1000		808		1027		968		686

References : (i) Venkatachelam, Pt. Kota, Chronology of Ancient Hindu History, Part I, pp. 27-32.

(ii) Pargiter, F.E., The Purāna Text of The Dynasties of Kali Age, pp. 13-17 67-68.

(iii) Agrawala, M., The Age of The Bharata War, pp. 170-71.

द्वाविंशति नृपाह्येते भविंतारो बृहद्रधाः ।
पूर्णं वर्ष सहस्त्रंतु तेषां राज्यं भविष्यति ।।

(*Vāyu*, CCLXIX, 30)

द्वाविंशच्च नृपाह्येते भवितारो बृहद्रधाः ।
पूर्णं वर्ष सषस्त्रं वै तेषा राज्यंभ विष्यति ।।

(*Bṛahmānda*, III, Upodaghatapada, Ch. LXXIV, 121)

बार्हद्रधाश्च भूपाला भाव्याः सहस्त्रवत्सरम् ।

(*Bhāgwata*, Sk. IX, Ch. XXII, 49)

इत्येते बार्हद्रधा भूपतयो वर्षसहस्त्रमेकं भविष्यंति ।

(*Viṣṇu*, 4, XXIII. 12)

Originally, the 1000 years of Bārhadṛathas composed of [(277 years for 10 kings from Bṛahadratha I to the Sahadeva)+(300 years for the post war 15 intervening Kuru kings who ruled over Magadha from Hastināpur)+(400 years for the remaining 22 post-war Bārhadṛatha dynasty kings who actually constitute the representative post-war Bārhadṛatha kings-list of Magadha in our purānas of modern times]. Thus originally (10+15+22=) 47 kings ruled over Magadha in 1000 years period i.e. (1000/47=) 21.3 years (average) per king.

The above mentioned (statistical Purānic data in tabular form) shows that when these figures were finally edited, the Purānic compilers had adopted, with confidence, the Greek-Babylonian influenced Chaturyuga calendar in which the interval between the beginning of Kaliyuga and the beginning of Vikṛama saṃvata became 3044 (≃3000) years rather than the original 1244 (≃1200) years. Because the interval between the two eras underwent an inflation factor of (3000/1200=) 2.5 times, therefore, it was the natural process to inflate-up the original 400 years for 22 post-war Bārhadṛatha kings by multiplying it with the same inflation-factor of 2.5 times into (400×2.5=) 1000 years. To justify 1000 years for the post-war Bārhadṛathas, later Purānic editors reinterpreted the Purānic statements (which originally defined the 1000 years duration for the total

Bārhadṛatha reign over Magadha from Bṛahadratha-I, the son of Vasu Chaidyōparichara up to the last Bārhadṛatha king Repuñjaya) to the 1000 years duration for the post-war Bārhadṛathas only as follows :

द्वाविंशति नृपा ह्येते भवितारो वृहद्रधाः ।
पूर्णं वर्ष सहस्त्रं वै तेषां राज्यं भविष्यति ॥

(*Vāyu*, XCIX, 308)

Not only the Bārhadṛathas list of Magadha got inflated by 2.5 times (i.e. from the original 400 years to 1000 years) but also the kings-list of intervening period from the end of Bārhadṛatha dynasty up to the beginning of Nandas also got the inflation, surprisingly, by the same inflation-factor of 2.5 times. Because Buddhist sources give 200 years only but, on the other hand, Purānas give 500 years for the same i.e. (500/200=) 2.5 times higher value. Therefore, we can conclude that the Chaturyuga calendar got an inflation of 2.5 times certainly after the advent of Nanda dynasty. It is more possible that this modification was done even after the advent of Vikṛamāditya era but since from the Mahāpadmananda, the regnal periods were some what supposed to be contemporary and certain i.e. beyond any doubt, therefore, inflation did not take place for the post-Nandas Chronology.

V.3. KINGS-LIST OF AIKŚVĀKU DYNASTY

Concerning the Aikśvāku dynasty, we have informed from the Mahābhārata epic that the Bṛahadabala (the 94th Solar dynasty king from Manu Vaivaṣvata—A.I.H.T., p. 149) was killed in Mahābhārata war. According to Purānas, Divākar, the Aikśvāku king of Ayōdhya, was the contemporary to the Kuru king Adhisīmākṛṣṇa and Bārhadṛatha king Senājit. At the time of the end of Bārhadṛatha dynasty with Repuñjaya in 639 B.C., we find a king Śuddhodana, the father of lord Buḍdha, was the reigning king of Aikśvāku dynasty.

According to Purānas, 21st king was Saṇjaya, to whom Buddhist literature (Dīpavaṃsa 3.44) designated as Jayasena. Probably, the

real name was the Saṇjayaṣena. The son of Saṇjaysena was the 22nd king Śākya according to Purānas and Sihahanu (or Singha hanu in Buddhist sources, probably the real name was Śākya Singha). According to Dīpvaṃsa (3.45-47), the sons of that (?) Sihahanu or Śākya Singha were five brothers—'Śuddhōdana and Dhota (Dhotōdana), prince Sakkodana (Sakṛōdhana), king Sukkodana (Sukṛōdhana) and king Amitodana', all these five kings had names containing the word 'odana'. All these five brothers might have ruled over 5 sectors of the Kośala kingdom.[7] Śuddhōdana was the eldest and ruled over the territory around Kapilvaṣtu. Another one, probably the father of Mahākośala, ruled over Sṛavāṣti. He, the son of Śuddhōdana, Siddhāttha, the chief of the world, begot Rāhulabhaḍda, and then left his home in order to strive for Buḍdhashipa.

Concerning the accurate chronology of Śuddhōdana, Bishop P. Bigandet's book entitled 'Life of Gaudama' on Burmese chronicle may be the most helpful. Bigandet states that 'it was in the eighty-sixth year of his grand father's era that he (Buddha) was married and also consecrated prince Royal by the pouring of the blessed water over his head'.[8] Again he states that 'in the year 148, on the full moon of katson on a Tuesday (Withāka) he expired; on the 12th after the full moon of the same month his corpse was laid on the funeral pyre.[9] Bigandet equates 1134 Pigan era with 1773 A.D. in which he states that his book was composed in the province of Dybayen[10] and in this book he equated 943 religion era (i.e. Buddha's Mahāparinirvāna Saṃvata) precisely with 400 A.D.[11] It makes the beginning of Buddha's nirvāna saṃvata with (943 years-400 A.D.=) 543 B.C. and in turn his grand fathers' era (i.e. Eetzena era) began with (543 B.C.-148 years=) 691 B.C. Thus it gives 691 B.C. for the coronation date of Buddha's grand father, the king Śākya on the throne of Kapilvaṣtu or Sṛavaṣti. Rev. Bigandet writes that 'Śuddhōdana breathed his last in the day of full moon of Wakhaon on Sunday at the rising of the Sun, in the year of Eetzena era 107 (691 B.C.+107 years=584 B.C.) at the advanced age of ninety-seven years[12] which gives precisely the birth date of king Śuddhōdana in (584 B.C.-97 years=) 681 B.C.

Thus on the basis of Bigandet's book, we can summarise few important date for the Aikśvāku dynasty around the Buddha's life as follows :

TABLE VII

S. No.	*Event*	*Eltzena era*	*Christian era*	*Reference*
1.	Coronation of king Śākya, Buddha's grandfather	0	691 B.C.	Vol. I, p. 52
2.	Birth of Śuddhōdana	10	681 B.C.	Vol. I, p. 52 & 208
3.	Śuddhōdana becomes Yuvarāja	28	663 B.C.	——
4.	Birth of Buddha	68	623 B.C.	Vol. I, p. 47
4a.	Birth of Bimbasāra	73	618 B.C.	——
5.	Buddha becomes Yuvarāja and also married	86	605 B.C.	Vol. I, p. 52
5a.	Coronation of Bimbasāra at the age 15 years	88	603 B.C.	
6.	Birth of Rāhula	95	596 B.C.	
7.	Buddha left Kapilvaṣtu	97	594 B.C.	Vol. I, p. 62
8.	Buddha enlightened and convert his son Rāhula as Bikku when Rāhula attained the age of 8 years only	103	588 B.C.	Vol. I, p. 97
9.	Death of Śuddhōdana at the age of 97 years	107	584 B.C.	Vol. I, p. 208
10.	Rāhula becomes king	107	584 B.C.	——
11.	Death of Bimbasāra at the 72nd year of Buddha's age	140	551 B.C.	Vol. I, p. 262
12.	Death of Buḍdha at the age of 80 years	148	543 B.C.	Vol. II, p. 69

This chronological analysis clearly shows that the king Rāhula, the son of Buḍdha, coronated on the throne of Kapilvaṣtu after the death of his grand-father Śuddhōdana, was only the 12 years old in 584 B.C. Therefore, Rāhula of Kapilvaṣtu can not be equated with the Aikśvāku king Mahākośala of Sṛāvaṣti who was the senior contem-

porary to the Magadha king Bimbasāra (5 years younger than Buḍdha—b. 618 B.C.—d. 551 B.C.) with whom Mahākośala married his daughter Kośaladevi. With all certainty, Śuddhōdana belonged to main Aikśvāku lineage and coronated after 663 B.C. at Kapilvaṣtu. He was the eldest son of the Kośala king Shākya. Therefore, he was the chief of the Aikśvāku kingdom, divided at that time into five sectors among the five sons of king Shākya. After the death of Śuddhōdana, in 584 B.C., Rāhula coronated on the throne of Kapilvaṣtu. According to purānas, Rāhula also was the chief of the Aikśvāku kingdom. After Rāhula, Purānas mention the next name Pṛasēnajit as the chief of the Aikśvāku kingdom. Pali chronicles[13] also indicating that Shākyas of Kapilvaṣtu, in latter time, had accepted the hegemony of Kośala and Pasendi (Pṛasēnajit) is often described as the head of a group of 5 Rājās. Thus, it was due to the transfer of hegemony, Purānas mention the name of Pṛasēnajit (the son of Mahākośala) as the successor of Rāhula, otherwise, both were the contemporary kings, at least for their death dates *c.* 546 B.C. by the hands of Viruḍdhaka.

Actually speaking, Purānic lists give only 23 kings after Bṛhadbala up to the Śuddhōdana, the contemporary king to the epoch of Bārhadṛatha's end in Magadha. The missing of merely one king from the purānic lists poses no problem before us, because, if we look closely at the Mahābhārata epic, we find easily that the Aikśvāku king Bṛhadbala was killed in 'Chakṛavyūha-yuḍdha' of Mahābhārata war by the hands of Pāṇḍava prince Abimaṇyu on that particular divine-day on which day Abhimaṇyu was himself killed.[14] We have next informed by the Aśwamedhic parvan[15] that an unnamed Aikśvāku king of Kośala was defeated by Arjuna, the protector of the Aśwamedhic horse. Purānas began the post-war Aikśvāku kings-list of Kośala kingdom with Bṛhaṭkaṣya, a 300 years later Aikśvāku descendent, assuming as the son of king Bṛhadbala, the Kośala king, killed in Mahābhārata war, in the same way as the Kuru king Janamejaya III was supposed as the son of king Parīkshit-II and also the Bārhadṛatha dynasty king Somādhi was supposed as the son of king Sahadeva, though, the name of Magadha king Meghasandhi was

clearly mentioned in the Aśwamedhic parvan of Mahābhārata epic as the son of Sahadeva who fought with Arjuna, the protector of horse.

Thus, due to the general purānic mistake, the actual son of king Bṛhadbala, whose name, unfortunately, not mentioned in the Aśwamedhic parvan, rules approx. 6 years, according to original 18 years War-theory, was not listed in the purānic kings-list. Including this king, the number of Aikśvāku sovereigns over Kośala kingdom becomes 24.

For cross-check, take into account the 'early contemporary dynasties' statement (Dynasties of Kali Age, p. 69) which gives the number 24 of Aikśvāku dynasty kings of Kośala kingdom, reigned up to the end of Bārhadṛatha dynasty and count the number of Aikśvāku kings after Bṛahadabala to Śuddhōdana which gives again precisely the number 24. Here the exact coincidence is achieved.

TABLE VIII

1. Unnamed King	9. Bhānuratha	17. Amitrajit
2. Bṛahat-kṣaya	10. Pratītaśva	18. Bṛhadbhṛāja
3. Urukṣaya	11. Supratīka	19. Dharmin
4. Vaṭsavyūha	12. Marudeva	20. Kṛtañjaya
5. Prativyoma	13. Sunakṣhatra	21. Raṇañjaya
6. Divākara	14. Kinnarāśva	22. Sañjaya
7. Sahadeva	15. Antarikṣha	23. Śākya
8. Bṛhadaśva	16. Suparṇa	24. Śuddhōdana

Including 15 intervening Kuru kings who ruled over Aikśvāku throne from Hastināpur, the total number of kings over Aikśvāku throne in 723 years becomes (23+15=) 38 which gives a reasonable average of (723/38=) 19.0 years per king.

V.4. KINGS-LIST OF KASHMIR KINGDOM

According to Kalhaṇa's Rājataraṇginī 1/60-64, Gonanda-I (1451-1401 B.C.) lived before the time of Bhārata battle. He was a

relative of Jarāsaṇdha. They both invaded against Sri Kṛṣṇa and beseized Mathurā. In the fight that ensued, Gonanda-I was killed by Balarāma. Dāmodar-I (1401-1353 B.C.) was the son of Gonanda-I.[16] On the eve of the 'svayaṃber' of the daughter of the Gandhāra king, Dāmodar-I went with a large army to disturb the function and was put to death by Sri Kṛṣṇa in 'Chakra Yuḍdha'. Then Sri Kṛṣṇa went to Kashmir and made the pregnant Yasōvatı, the wife of Dāmodar-I, queen of Kashmir, with the consent of ministers. Some time after, the queen gave birth to a son and he was the Gonanda-II. Soon after the child was named, he was crowned king on the same day and regal ceremonies were duly performed. As Gonanda-II was infant king, Rājataraṇginī 1/82 relates that both Kaurava and Pāṇḍava did not seek his support for the war. The history of these four rulers, from Gonanda-I to Gonanda-II was written by Nīlamuni.

According to Rājataraṇginī 1/83, from the 5th to the 39th king, that is the names of 35 rulers were not known due to the complete

आम्नायभंङ्गान्निर्नष्टनामकृत्यास्ततः परम् ।
पञ्चत्रिंशन्महीपाला मग्ना विस्मृतिसागरे ॥ 1/83

destruction of the historical records. However, Mulla Ahmed's History of Kashmir written in Persian language gives the list of the lost 35 kings of Kashmir from no. 5 to 39 of the list given in Kalhaṇa's Rājataraṇginī. According to it, Gonanda-II (4th king of R.T.) was killed, in a battle, by Parīkṣhit-II, king of Hastināpur. As Gonanda-II left no heir, Parīkṣhit-II (5th of Kash. list) incorporated Kashmir into his empire. He ruled it from Hastināpur for 42 years. At the time of his death, Parīkṣhit-II gave Kashmir to his second son 'Harnadeva'. 23 kings of the Pāṇḍava dynasty and 12 other kings ruled up to 1324 laukika era i.e. (19421324=) 618 B.C. According to Rājataraṇginī 1/84 immediately after the 35 forgotten kings, Lava (the 40th) coronated on throne of Kashmir for 39 years (i.e. 618-579 B.C.). After Lava, Kush or Kuśeśayāksha (41st of R.T. 1/88) re'gned over Kashmir. The Kuśa or Kuśeśayāksha may be equated with the

Pukkusāti or Pumakusāti of Buddhist Sources.[17] This equation makes the Kuśa or Pukkhusāti (579-540 B.C.) contemporary to Bimbasāra (579-551 B.C.) and Canda Pradyota of Avanti, and Lava (40th of R.T. 1/84), began with 618 B.C., to the Bimbasāra's father Kshattroja (603-579 B.C.). Consequently, the last king, of the list of 35 forgotten kings of Rājataraṇginī 1/83, the Bhāgawant (39th) or Babighana (38th) was certainly contemporary to the last Bārhadṛatha king Repuñjaya. Therefore, from Parīkṣhit-II upto the end of Bārhadṛatha dynasty, the Kashmir throne was enjoyed by 35 kings (and add Gonanda-II reign equal to the two kings' period in order to reach up the date of Parīkṣhit's birth, we can get 37 kings over Kashmir) which is in exact coincidence with the number of other kings of the same duration, Bārhadṛathas over Magadha (22+15=37) Aikśvākus (23+14=37), Kurus (36+1=37). Therefore, in general, 37±1 kings ruled for 723 years period which gives finally a reasonable average of (723/37=) 19.5 years per king.

REFERENCES

1. Saṃchchipṭa Mahābhārata (Hindi), part II, Aśwamedhic Parva, Ch. 950, pp. 1587-89 tells us that just before the performance of Aśwamedha Yajña by Yuddhisthira, prince Arjuna, the Protector of Aśwamedha horse defeated the kings of Magadha, Chedi, Kāshi, Kośala, Anga and Gandhāra etc., etc.

2. Saṃchchipta Mahābhārata (Part I), Ādiparva, Ch. X, p. 22.

3. Ibid., Adiparva, Ch. II, p. 5.

स तथा भ्रातृन संदिश्य तक्षशिला ।
प्रत्यभिप्रतस्थे तं च देशं वंशे स्थापयामास ।।

(*Mahābhārata epic*, 1/3/20)

विसर्जयित्वा विप्रांस्तान् राजापि जनमेजय: ।
ततस्तक्षशिलाया: स पुनणायाद् गजाह्वयम् ।।

(*Mahābhārata epic*, 18/5/34)

4. Harivaṃsha Purāna; Bhaviṣya Purāna, Ch. 26, verse 28-38; also, see : full Ch. 28.

5. Saṃchchipṭa Mahābhārata (Hindi) part II, Aśwamedhic Parva, Ch. 950, pp. 1587-1589. Here we find Meghasandhi, the son of Sahadeva, as the name of the king of Magadha, who fought with the Kuru prince Arjuna, the Protector of Aśwamedha horse.
6. Based on a rare manuscript of Maṭṣya, no. 3347, Jackson collection, India Office London; Noticed by Pargiter, Purana Text of Dynasties of Kali Age, p. 17.
7. There are also references in Pali literature indicating that the Shakyas, in later time, had accepted the hegemony of Kośala and Pasendi (Prasenajit) is often described as "the head of a group of five Rajas"—Tripathi, Hist. of Anc. India, p. 91.
8. Bishop, P. Bigandet, Life or Legend of Gaudama, Vol. I, p. 52.
9. Ibid., Vol. II, pp. 72, 73, 74.
10. Ibid., Vol. II, p. 149.
11. Ibid., Vol. II, p. 145.
12. Ibid., Vol. II, p. 208.
13. Tripathi, R.S., Hist. of Anc. India, p. 91; see : fn. 65.
14. Saṃchchipṭa Mahābhārata (Hindi), p. 738.
15. Saṃchchipṭa Mahābhārata (Hindi), p. 1538.
16. Kalhaṇa's Rājataraṇginī, 1/65-70.
17. Majjhima Nikāya, Dhatu Vibhanga Sutta, Attakatha, P.H.A.I., p. 204, fn. 4; Rhys Davids, Buddhist India, p. 28, fn. 2; also cited in H.C. Ray Chaudhari, Pol. Hist. of Anc. Ind. (VII ed.) p. 102, fn. 3; and p. 132; Malalasekara's Dictionary of Pali Proper Names, Vol. II, p. 215 and Essays on Gunadhya, p. 176 says that Pukkusati (Pushakarasarin) sent a letter and embassy to Magadha king Bimbasara and defeated Chanda Pṛādyōta of Avanti.

6

Dynastic Lists of North Indian Kings After the End of Barhadrathas and Before the Beginning of Nandas

VI.1. KINGS LIST OF MAGADHA AND AVANTI

We have already analysed in sec. V.2. that Bārhadṛatha dynasty had been ceased to reign in (1362-723=) or (1339-700=) 639 B.C. Purānas enumerate a geneology of 138 years (Pṛadyōtas)+362 years (Śaśunāgas)=500 years total for the post-Bārhadṛathas but pre-Naṅdas period whereas Buddhists give only 200 years for the same. Scholars prefer Buddhist figure because it is found nearer to the truth. But the correct order and correct regnal years of the kings is still a crucial point of discussions among scholars. In my opinion, Purānic compilers, originally, had two parallel lists– (i) list of Avaṇti containing Pṛadyōtas and subsequently Śiśunāga and Kākavarṇa and then (ii) the list of Magadha kings beginning with Kshemadharmā and ending with Mahānandi for post-Bārhadṛathas but pre-Nandas period. In later period, due to the ignorance or copiest's mistake those two parallel separate lists of Avaṇti and Magadha were written in series sequence forming a single unabridged list of Magadha kings as follows :

बृहद्रधेष्वतीतेषु वीतिहोत्रेष्व वंतिषु ।
पुलकः स्वामिनं हत्वा स्वपुत्रमभिषेक्ष्यति ॥

मिषतां क्षत्रियानांतु बालकः पुलकोद्भवः ।
सवै प्रणत सामंतो भविष्यो नयवर्जितः ॥

(*Vāyu*, 90, 309-314; *Matsya* 270, 1-5, *Brahmāṇda*, III, 74, 123-127)

Bṛhadratheṣv[1] atītesu[2] Vītihotreṣv[3] Avantiṣu[4]
Pulikaḥ[5] svāminaṁ hatvā[6] sva[8]-putram abhiṣekṣyati
miṣatāṁ[10] kṣatriyānāṁ[11] ca[12] Bālakaḥ[14] Pulik-ôdbhavaḥ[15]

Sunikaḥ[7] svāminaṁ hatvā putraṁ samabhiṣekṣyati[9]
miṣatāṁ kṣatriyānāṁ hi[13] Pradyotaṁ[16] Ṣuniko[17] balāt

sa vai praṇata[19]-sāmanto[20] bhaviṣyo[21] naya-varjitaḥ[22]

(D.K.A., p. 18)

नन्दिवर्धन स्तत्पुत्रः, पन्चप्रद्योतना इमे ।
अष्ट त्रिंशोत्तरशतं भोक्ष्यन्ति पृथिवीं नृपाः ॥

(*Bhāg. Pur.*, *Sk.* XII, Ch. II, 4)

अष्टत्रिंशच्छतं भाव्याः प्रद्योताः पन्चते नृपाः ॥

(*Vāyu*, 99/313; *Brahamānda*, III, 74, 126)

द्विपन्चाशच्छते मुक्तव प्रणष्टांः पन्चते नृपाः ॥

(*Maṭsya*, 270, 6)

ततो नंदी ।7। इत्येतेऽष्टत्रिंशद्त्तरंशतं पंचप्रद्योताः पृथिवीं भोक्ष्यन्ति ।8।

(*Vishnu Pur.*, IV, XXIV, 7-8)

dvi-pañcāśat tato[39] bhuktvā[40] aṣṭa-trimśac[41]-chatam[42] bhāvyāḥ[43]
praṇaṣṭaḥ[44] pañca te nṛpāḥ Prādyotāḥ[45] pañca to sutāḥ[46]

(D.K.A., p. 19)

हत्वा तेषां यशः ऋतस्नं शिशुनागो भविष्यति ।
वाराणस्याम् सुतं स्थाप्य श्रयिस्यति गिरिव्रजं ॥

(*Amt.* 270, 6-13; *AVā*, 99, 314-322; *Brahamānda*, III, 74, 127-135)

Hatvā[1] teṣāṁ yaśah kṛtsnaṁ Śiśunāgo[2] bhaviṣyati

Vārāṇasyāṁ sutaṁ sthāpya[3] śrayiṣyati[5] Girivrajam

Vārāṇasyām sutas tasya[4] sa yāsyati[6] Girivrajam[7]

(D.K.A., p. 21)

भविष्यन्ति च वर्षाणि षष्ट्युत्तरशतत्रयं ।।
शिशुनागा दशै वैते राजानः क्षत्रबंधवः ।।

(*Bṛahamānda*, III, 74, 135)

इत्येते भवितारो वै वंशेऽस्मिन् शिशुनाकजाः ।
शतानि त्रीणि पूर्णानि षष्टिवर्षाधिकानि च ।।

(*Maṭṣya*, 270, 14)

इत्येते भवितारो वै शैशुनाकानृपा दश ।
शतानि त्रीणि वर्षाणि द्विषष्टयभ्यधिकानितु

(*Vāyu*, 99, 322)

ity ete bhavitāro[41] vai[42] Śaiśunāga nṛpā daśa[43]
Śatāni[44] trīṇi Varṣāṇi[45] ṣaṣṭi-varṣ-ādhikāni tu[46]
Śiśunāgā[47] bhaviṣyanti[48] rājānaḥ kṣatrabandhavaḥ[49]

(D.K.A., p. 22)

In order to satisfy the various Purānic, Buddhist and Jaina statements, in their unaltered form, we are bound to split-off the Purānic kings-list of Pṛadyōta+Śiśunāga dynasty into two parallel sub king-lists—kings-list (A) of Avaṇti kings which accommodates all the Pṛadyōṭas+Śaśunāgas up to the Kākavarṇa only. With Kākavarṇa, we have terminated the kings-list (A) because immediately after the Kākavarṇa (or Kālāshoka of Buddhist sources), Buddhist chronicle place Nanda dynasty. Therefore, purānic kings-list after Kākavarṇa is considered as a separate parallel kings-list (B) of Magadha kings. Both kings-list (A) and (B) runs parallel because they both represent the same duration i.e. they both simultaneously began immediately after the end of Bārhadṛathas and finished just before the advent of Mahāpaḍmananda.

VI.1.1 *Purānic Kings-list (A) of Avanti-kings*

TABLE IX

(639/638 B.C.-424 B.C.)

S. No.	*Maṭṣya*		*Vāyu*		*Bṛahamānda*	
1.	Bālaka	23	Narotham	23	Pradyoti	23
2.	Pālaka	28	Pālaka	24	Pālaka	24
3.	Vishākhayūpa	53	Vishākhayūpa	50	Vishākhayūpa	50
4.	Sūryaka	21	Ajaka	21	Ajaka	21
5.	Nandibardhana	30	Vartivardhana	20	Nandivardhana	20
	639-484 B.C. =	155	(638-500 B.C.=)	138	(638-500B.C.=)	138
6.	Śiśunāga	40	Sisunaga	40	Śiśunāga	40
7.	Kākavarṇa	26	Kākavarṇa	36	Kākavarṇa	36
	639-418 B.C.=	221	638-424 B.C.=	214	638-424 B.C.=	214

Note :—(i) First name Pradhyota is incorrect in Vāyu and Maṭṣya.

(ii) The order of the kings are also erroneous. In Jaina sources, this dynasty of Ujjaini is often mentioned as Pālaka dynasty whereas in Purānas it is often called Pṛadyōta dynasty. The succession of names should be in the following order : Sūryaka (639-618 B.C.); Vishākhyūpa (618-565 B.C.); Pradyote (565-542 B.C.); Pālaka (542-514 B.C.) and Nandibardhana (514-484 B.C.). Only then, Chanda-Pṛadyōte would become the contemporary to the Bimbasāra and Ajātshatru of Magadha and would die along with the Jain Mahābira in the same night in [638 B.C.–(21+50+23)=] 544 B.C. (Vāyu and Bṛahmānda) and 639 B.C.–(21+53+23)=542 B.C. (Maṭṣya Purāna). It shows that up to the end of king Pṛadyōta, Vāyu and Bṛahmānda list is more genuine and Maṭṣya list gets a maximum inflation of 3 years only particularly with the reign of Vishākhyūpa. Therefore, king Vishākhayūpa really ruled for (618-568 B.C.=) 50 years and thus Pṛadyōta for (568-545/544 B.C.=) 23 years. This inflation-figure of 1-3 years, if really crept in the Maṭṣya list, may be added with the 58 years duration of (post Mahābira period) Pālaka dynasty kings in order to get a synchronism with the 60 years Pālaka dynasty rule over

Avaṇti after the death of Mahābir.[1] Therefore, we can use (545 B.C.-514 B.C.=) 31 years for Pālaka and (514-484 B.C.=) 30 years for Nandibardhana.

(iii) The total (639-484 B.C.=) 155 years for five Pṛadyōta dynasty kings is more correctly given in Maṭṣya Purāna (even Maṭṣya 270/5 itself totals out the five Pṛadyōtas to 152 years only) rather than (638–500=) 138 years duration given in other Purānas. Concerning the total period of kings, the Pṛadyōtas plus Śaśunāgas, Vāyu and Bṛahamānda uses higher regnal period for Śaśunāga dynasty in order to achieve the correct total of (638-424 B.C.=) 214 years. Actually Kākavarṇa ruled only for (444-424 B.C.=) 20 years according to the Buddhist source Mahāvaṃsa but Maṭṣya gives 26 years (inflated by 6 years) and Vāyu & Bṛahamānda gives 36 years (inflated by 16 years). In order to get a synchronism between the available sources, we can omit 6 years from the reign of Kākavarṇa of Maṭṣya list but 16 years inflation figure of Kākavarṇa reign of Vāyu and Bṛahamānda Purāna can not be omitted but may be added 10 years to the reign of Nandivardhana and 6 years to the Pālaka reign. Thus, we can construct the kings-list (A) of Avaṇti, in modified form, best to suit with various data as follows :

TABLE X

S. No.	*Name of King*	*Christian Calendar Dates*	*No. of Years*
1.	Sūryaka	(639-618 B.C.=)	21 years
2.	Vishākhayūpa	(618-568 B.C.=)	50 years
3.	Pṛadyōta	(568-545 B.C.=)	23 years
4.	Pālaka	(545-514 B.C.=)	31 years
5.	Nandibardhana	(514-484 B.C.=)	30 years
6.	Śiśunāga	(484-444 B.C.=)	40 years
7.	Kākavarṇa	(444-424 B.C.=)	20 years
	TOTAL	(639-424 B.C.=)	215 years

After the end of Kākavarṇa in 424 B.C., the kingdom of Avaṇti became under the sway of Nanda dynasty for (424-324 B.C.=) 100 years.

VI.1.2. *Purānic Kings-List (B) of Magadha Kings*

TABLE XI

S. No.	*Maṭsya*		*Vāyu*		*Bṛahmānda*	
1.	Kṣhemadharma	36	Kṣhemavarma	20	Kṣhemadharma	x
2.	Kṣhemajit	24	Ajātshatru	25	Kṣhatrojā	40
3.	Viṇdhyasēna	28	Kṣhatrojā	40	Vidhisār	38
4.	Ajātshatru	27	Vivisār	28	Ajātshatru	25
5.	Vaṃshaka	24	Darshaka	25	Darbhaka	35
6.	Udāsin	33	Udāyee	33	Udāyee	33
7.	Nandibardhana	40	Nandivardhana	42	Nandivardhana	40
8.	Mahānandi	43	Mahānandi	43	Mahānandi	43
	639-384 B.C.=	255	638-382 B.C. =	256	638-384 B.C. =	254

The Purānic kings-list (B) of Magadha kings shows clearly that it began from the king Kṣhemadharma immediately after the Śaśunāga king Kākavarṇa of Avaṇti-list. It is evident from these kings-lists (A) and (B) that Purānas first give the post-Vītihotra kings-list of Avaṇti which contains Pṛadyōtas and Śaśunāgas. Immediately after the end of Avaṇti-list, just before the beginning of Nanda dynasty, without any mention, Purānic chronicles began their kings-list (B) of Magadha kings and therefore later compilers ignorantly took it as a single list of Magadha kings.[2] Purānic kings-list (B) of Magadha kings gives us a total of 255±1 years period between the end of Bārhadṛathas and the coronation of Mahāpadma Nanda due to the wrong inclusion of Nandibardhana of Pṛadyōta dynasty of Avaṇti into Magadha kings-list. This hypothesis thus reduces the total of 255±1 years to the figure—(i) Maṭṣya (255-40=) 215 years; (ii) Vāyu (256–42=) 214 years, and (iii) Bṛahamānda (254-40=) 214 years. Hence the coronation date of Mahāpadma Nanda again comes out to be—

(i) Maṭṣya (639 B.C.+215 years=) 424 B.C.; (ii) Vāyu (638 B.C.+ 214 years=) 424 B.C., and (iii) Bṛahamānda (638 B.C.+214 years=) 424 B.C. Therefore, all the three Purānas, for the both kings-lists (A) and (B), have a spectacular coincidence for the coronation epoch of Mahāpaḍma Nanda in 424 B.C.

Not only the wrong inclusion of Nandivardhana of Avaṇti happened in the Magadha list, but vice versa, wrong inclusion of Mahānandi of Magadha list can be shown in the Pṛadyōta dynasty list of Avaṇti because Viṣhṇu Purāna, while dealing with the 138 years for 5 Pṛadyōta dynasty kings of Avaṇti adds wildly Mahānandi just after the last Pṛadyōta king Nandivardhana by saying briefly 'Tato Nandi'. These overlappings, exhibited in the kings-list (A) of Avaṇti and kings-list (B) of Magadha, might be happened due to the fact that the last Pṛadyōta king Nandivardhana of Avaṇti was uprooted by the king Śiśunāga in *c.* 484 B.C. Later on this king Śiśunāga captured Kāshi (formerly under the sway of Magadha) and placed his son there, and further marched and captured the throne of Magadha around 470 B.C.-466 B.C. more probably in 467 B.C. after that Śiśunāga ruled for 22/23 years jointly over Magadha and Avaṇti both up to 444 B.C. and then Kākavarṇa for 20 years. Śiśunāga and Kākavarṇa jointly known as the Mahānaṇdin (dynasty), the father of Nava Nandas of Purānas, who ruled collectively for (23 years Śiśunāga+20 years Kākavarṇa over Magadha=) 43 years of Magadha kings-list B. Because before Mahānaṇdi (the dynastic name for Śiśunāga and Kākavarṇa), on Avaṇti throne, there ruled last Pṛadyōta dynasty king Nandivardhana, therefore later ignorant Purānic editors often mistaken to add Nandivardhana before Mahānaṇdi in Magadha kings-list (B), or in vice versa fashion, Mahānaṇdi (or briefly 'Naṇdi'-Vish. Pur.) after Naṇdivardhana in Avaṇti kings-list (A).

VI.1.3. *Buddhist Kings-list (C) of Magadha Kings*

TABLE XII

S. No.	*Mahāvamsa*		*Dīpavamsa (Ceylonese Chronicle)*	
1.	Biṃbasāra	52	Biṃbasāra	52
2.	Ajātshatru	32	Ajātshatru	32
3.	Udāyin or Udāibhaḍḍaka	16	Udāyin or Udāyibhaḍḍaka	16
4.	Anuruḍḍhaka	8	Anuruḍḍhaka	8
5.	Muṇdā	8	Muṇdā	
6.	Nāgadāsaka	20	Nāgadāska	24
	(603-457 B.C.=)	136	(603-471 B.C.=)	132
7.	Śiśunāga	18	Śiśunāga	18
8.	Kālāshoka	20	Kālāshoka	28
9.	Ten Sons of Kālāshoka	22	Ten sons of Kālāshoka	22
	(603-407 B.C.=)	196	(603-403 B.C.=)	200

Buddhist sources began their chronology precisely from 602/603 B.C. with the reign of king Biṃbasāra at Magadha throne about 60 years before the death of lord Buddha in 544/543 B.C. and (639/638 B.C.-603/602 B.C. =) 36 years after the beginning of post Bārhadṛatha period in Magadha of Purānic chronicle. Buddhist sources state that Biṃbasāra was the 5 years junior to the Gautam Buḍḍha[3] thus born in (623 B.C.+5 years=) 618 B.C. When he was 15 years old, he received royal coronation after his father's death in (618 B.C.+15 years=) 603 B.C.[4] and his father was named asking Bodhīsa (Bhatīya) of Rājagṛiha who was the friend of Śuddhōdana.[5] Biṃbasāra reigned for (603–551B.C.=) 52 years.[6]

VI.1.4. *Chronological Analysis of First-Three Post-Bārhadṛatha Period Kings of Magadha*

After the close look of various Purānic and Buddhist sources, it is concluded that the first three kings viz. Kṣhemadharma, Kṣhatrojā and Biṃbasāra forms a special configuration of the sum of two

fractions with reference to their regnal periods and all of them were coincided on the death date of Biṃbasāra in 551/550 B.C. as follows :

(i) Kṣhemadharma : 36=20+16; (639-619 B.C.)+(619-603 B.C.)

(ii) Kṣhatrojā : 40=16+24; (619-603 B.C.)+(603-579 B.C.)

(iii) Biṃbasāra : 52=24+28; (603-579 B.C.)+(579-551 B.C.)

(i) Kṣhemadharma's regnal period of 36 years is shown by Maṭṣya while Vāyu and Bṛahamānda gives only 20 years (actually Bṛahamānda does not mention any regnal period for Kṣhemadharma but his 20 years may evidently be exhibited as an inflation figure of 10 years with Vidhisār's reign from 28 to 38 years and further 10 years with Darbhaka's reign from 25 to 35 years).

(ii) Kṣhatrojā's reigning period of 40 years is shown by Vāyu and Bṛahamānda while Maṭṣya gives only 24 years. Thus, the collective reigns of the two viz. Kṣhemadharma+Kṣhatrojā, in all the three Purānas becomes (Maṭṣya : 36+24=) or (Vāyu & Bṛahamānda : 20+40=) 60 years.

(iii) Biṃbasāra's regnal period of 28 years is shown by the Maṭṣya Purāna; Vāyu and also Bṛahamānda (after getting out the 10 years inflation figure 38–10=) 28 years while Buddhist sources viz. Mahāvaṃsa and Dīpavaṃsa etc. give 52 years.

Therefore, in my opinion, Kṣhemadharma, the grand father of Biṃbasāra, ruled for (639-603 B.C.=) 36 years as Maṭṣya Purāna intended. In the year 619 B.C., Kshetṛajña or Kṣhatrojā, the father of Biṃbasāra, became Yuvarāja of the Magadha throne but he became the actual sovereign in 603 B.C. after the death of Kṣhemadharma. Vāyu and Bṛahamānda wrongly taken (619-579 B.C.=) 40 years period for the Kṣhatrojā as a sovereign which was really the period from the ceremony of consecration of prince Royal (i.e. Yuvarāja) up to the death of Kṣhatrojā. Thus Kṣhatrojā was the real sovereign only for (603-579 B.C.=) 24 years as Maṭṣya Purāna intended. On the same line of thought, Biṃbasāra consecrated as

prince Royal at the age of (618–603=) 15 years in 603 B.C., the year in which his grand father (not the father as intended by the Buddhist sources) died, and his father becomes the real sovereign of Magadha. Kṣhatrojā or Kṣhetṛajña, the father of Biṃbasāra, died in the year 579 B.C. and thus Biṃbasāra ruled only for (579–551=) 28 years. Here we can say, with all certainty, that Buddhist sources give the (603-551 B.C.=) 52 years period for Biṃbasāra, which was actually the period from the consecration of prince Royal (Yuvarāja) epoch up to the death of Biṃbasāra, while (579-551 B.C.=) 28 years period, given in Purānas, was the actual sovereign period of Biṃbasāra. In my opinion, the name 'Śrenika' given to Biṃbasāra by the Jain source Parisisthaparavana of Hema Chandra was really the Prākrit-equivalent of Kshetrajña, the father of Biṃbasāra, rather than to Biṃbasāra. Buḍdhīsa or Bhatīya of Buddhist sources (Dīpavaṃsa 3.53) was also equivalent to the Kshetrajña, the father of Biṃbasāra.

VI.1.5. *Ajātshatru and Darshaka*

Ajātshatru ruled (551-524 B.C.=) 27 years according to Maṭṣya and (550-525 B.C.=) 25 years (Vāyu and Bṛahamānda) while Buddhist sources give (551-519 B.C.=) 32 years i.e. an inflated figure of 5 years due to the transposition of later part of Buddhist kings-list. After Ajātshatru, Purānas place king Darshaka for (Maṭṣya : 524–500 =) 24 years or (Vāyu and Bṛahamānda : 525–500 B.C.=) 25 years. Thus arriving at 500 B.C. for the end of Darshaka's reign unanimously by all the Purānic sources and after that all the Purānas give (500–467 B.C.=) 33 years for the king Udāyi.

Buddhist sources, on the other hand, omits the name of Darshaka[7] and place Udāibhaḍdaka, immediately after the end of Ajātshatru, for 16 years only. After Udāyibhaḍdaka, Anuruḍdhaka and Muṇda for 8 years (Dīpavaṃsa) (or 8+8=) 16 years (Mahāvaṃsa) and then Nāgadāsaka for 24 years (Dīpavaṃsa) or 20 years (Mahāvaṃsa). In my opinion, Buddhist list, after the Ajātshatru was some what undergone to the transposition with reference to the king Nāgadāsaka. King Nāgadāsaka, with all certainty, can be equated with the king Darshaka of Purānas. Maṭṣya Purāna gives 24 years for

Darshaka (or Vaṃshaka) while Buddhist Ceylonese chronicle (D.V.) also preferred precisely the 24 years period for Nāgadāsaka. Mahāvaṃsa, on the other hand, gives only 20 years (i.e. 24–20=4 years less period) for Nāgadāsaka, in effect to neutralise the effect of (32–27=) 5 years inflation period crept in the Ajātshatru's reign with reference to the Maṭṣya Purāna figure and thus reducing to the (5–4=) 1 year inflation figure with reference to the Purānic data (500 B.C.) for the end of king Darshaka in (551 B.C.+32 years Ajātshatru's reign=519 B.C.; 519 B.C.+20 years Nāgadāsaka's reign in Mahāvaṃsa=) 499 B.C. Here again, it can be said, with all certainty, that Ajātshatru ruled really as the sovereign during (551–524 B.C.=) 27 years as Maṭṣya Purāna intended. 5 years inflation figure, in Buddhist sources, crept due to the fact that Ajātshatru consecrated as prince Royal just 5 years before, in (551 B.C.–5 years=) 556 B.C., the death of his father Biṃbasāra.

VI.1.6. *King Udāyi or Udāyibhaḍdaka*

After Darshaka of Purānas (524–500 B.C.) or Nāgadāsaka of Buddhists (519–499 B.C.), all the three mentioned Purānas place king Udāyi for (500–467 B.C.=) 33 years while Buddhist source Mahāvaṃsa place Udāyibhaḍdaka for (499–483 B.C.=) 16 years; Anuruḍdhaka for (483–475 B.C.=) 8 years and Muṇda for (475–467=) 8 years. Ceylonese chronicle (Dīpavaṃsa), on the other hand, used the original (519–495 B.C.=) 24 years reigning period for Nāgadāsaka, therefore the inflation figure of 6 years, crept in the Ajātshatru's reign, was still running in to the reign of Nāgadāsaka as well as up to the Udāyibhaḍdaka (495–479 B.C.=16 years) with reference to the Purānic data (Udāyi's 16 years reign coincided with 500 B.C.+16 years=) 484 B.C. Therefore, in order to compensate the same, Ceylonese chronicle (D.V.) utilises (479–471 B.C.=) 8 years only, instead of (8+8=) 16 years for the Anuruḍdhaka and Muṇda. Thus Ceylonese chronicle (D.V.) data was, in fact, finally lagged by (471 B.C.–467 B.C.=) 4 years with respect to the correct epoch 467 B.C. for the end of Purānic Udāyi or Muṇda of Buddhist sources.

VI.1.7. *Mahānandi of Magadha or Śaśunāgas of Avaṇti*

Purānas placed the end of king Udāyi in 467 B.C. while Buddhist sources in 483 B.C. on the Magadha throne. It is said in the Parisisthaparavana that the king of Avaṇti was an enemy of Udāyin. The war of nerves (fear in hearts ?) began in the time of Ajātshatru must have been continued in the time of Udāyin also. It was finally decided in the time of Śiśunāga. According to Maṭṣya Purāna :

द्विपन्चाशच्छते भुक्तव प्रणष्टा: पन्चते नृपा: ।। 270/5
हत्वा तेषां यश: कृतस्नं शिशुनागो भविष्यति ।
वाराणस्याम् सुतं स्थाप्य श्रयिस्यति गिरिव्रजं ।। 270/6

Śiśunāga defeated, first, the last Pṛadyōta dynasty king of Avaṇti, the Nandivardhana in 484 B.C. and then captured Vārānasi and finally Magadha in 467 B.C. It takes 16/17 years to Śiśunāga to reach Magadha from Avaṇti. Probably Anuruḍdhaka and Muṇda of Buddhist Magadha list, were the near relatives of Śiśunāga who were marching ahead along with the army. Śiśunāga, himself, still staying in Ujjain till the final capture of Magadha throne in 467 B.C. after the death of king Udāyin of Magadha. But later editors of Purānas misunderstood for the Pṛadyōtas of Avaṇti. They have wrongly placed Pṛadyōtas, initially, in Magadha. Buddhist and Jain traditions have though placed Pṛadyōtas in Avaṇti but wrongly equated the defeat date 484/483 B.C. of Pṛadyōtas by Śiśunāga as the simultaneous event for the defeat of Udāyin in 467 B.C. by Śiśunāga. Thus Buddhists made the end of Udāyin of Magadha in 484/483 B.C. and the difference period of 16/17 years was given to the relatives of Śiśunāga viz. Anuruḍdhaka and Muṇda on Magadha throne, who, in all certainty, never ruled over Magadha kingdom, they were still heading towards Magadha during this period.

We have thus finally decided that Śiśunāga became the king of Avaṇti, after defeating the last Pṛadyōta dynasty king Nandivardhana, in 484 B.C. as intended by the Maṭṣya Purāna (Kings-list A of Avaṇti), and ruled over Avaṇti for (484-444 B.C.=) 40 years. During his 40

years period he attacked over various sections towards east and made glorious victories over Vārānasi and finally over Magadha in 467 B.C. after the death of Udāyi. Purānic kings-list (B) of Magadha kings in all Purānas included Śaśunāgas after the king Udāyi by the dynastic name of Mahānandi, rather than with the proper names of Śiśunāga and Kākavarṇa, for (467–424 B.C.=) 43 years. During the sum of (467–424 B.C.=) 43 years, it seems that individually Śiśunāga ruled for (467–444 B.C.=) 23 years and Kākavarṇa for (444–424 B.C.=) 20 years over Magadha. Buddhist sources, on the other hand, give 18 years only for Śiśunāga (Mahāvaṃsa and Dīpavaṃsa both) rather than the actual figure of 23 years and 28 years (Dīpavaṃsa) or 20 years (Mahāvaṃsa) for Kālāshoka.

Concerning the Ceylonese chronicle (D.V.), we can say, with all certainty, that it had missed on (16–8=) 8 years period for the reigning periods of Anuruḍdhaka and Muṇda because it gives only 8 years for both of them while both of them really covered 16 years period in which Śiśunāga dynasty made their movements from Avaṇti to Magadha. And this 8 years missing period was wrongly added to the reign of Kālāshoka from 20 to 28 years. Thus on transferring this 8 years to its original place, in the reign of Anuruḍdhaka and Muṇda, from the Kālāshoka's reign, Ceylonese chronicle now seems to be intended to fix the end of Anuruḍdhaka and Muṇda in (479 B.C.+16 years=) 463 B.C. rather than in 471 B.C. From Ajātshatru's reign reference, we know that the inflation figure of Buddhist sources over the Maṭṣya Purāna was (32–27=5 years), therefore on including 5 years inflation figure Buddhist Ceylonese chronicle should give the epoch (467 B.C. + 5 years=) 462 B.C. for the beginning of Śiśunāga in Magadha. On taking 462 B.C., the Buddhist figure, Śiśunāga's (462–444 B.C.=) 18 years and Kālāshoka's (444–424 B.C.=) 20 years can be justified. For the end epoch of Kālāshoka's reign king-lists A, B, and C all are agreed to coincide with 424 B.C.

Buddhist sources give another (424–402 B.C.=) 22 years for the joint rule of sons of Kālāshoka. Mahābodhivaṃsa gives their names as follows.[8]

1. Bhaḍrasena
2. Koraṇḍavarṇa
3. Maṇgura
4. Sarvajaña
5. Jālika
6. Ubhaka
7. Saṇjaya
8. Koravya
9. Nandivardhana
10. Paṇchamaka

But Purānic sources, at first sight, seem to be silent for the sons of Kālāshoka. Because all purānas states that the Mahāpadmananda or Ugrasena was the son of Mahānandi the king of Magadha who ruled just after the end of Mahānandi.

VI.1.8. *Jain Chronological Analysis*

In the year A.D. 1304 the famous Jain scholar Merutunga wrote his Pṛabaṇdhachintāmani and two years later he composed the Vichārasṛeni, a commentary on his Therāvali. In this last work he informs us of a remarkable kings-list[9] of which the first sentence is : 'Pālaka, the lord of Avaṇti, was anointed in that night in which the Arhat and Tirthaṇkara Mahāvira entered Nirvāna'. This kings-list explicitly assigns 60 years for Pālaka and then 155 years for Nandas i.e. (60+155=) 215 years between the death of Mahāvira and the coronation of Chandragupta Maurya. But some European scholars put a question-mark on the existence of the 60 years rule of Pālaka over Ujjain on the basis of Hemachandra's statement.

Hemachandra (A.D. 1088-1170), biographer at the court of king Jayasiṃha of Gujrat and afterwards of the later's successor Kumārapāla wrote a book on the Jain Patriarchs from the epoch of Ajātshatru down to the reign of Saṃprati, the grandson of king Ashoka. In this book entitled Parisisthaparvan, VIII, 341, he says : 'And thus 155 years after the liberation of Mahāvīra, Chaṇdragupta became king'. In consequence of this information, Jacobi remarks[10]: 'Pālaka had, most probably, no place in the original chronology of the Jainas. He is, I am inclined to believe, a mere chronological fiction of the Jainas introduced in order to make it better agree with Buddhist chronology of Ceylon'.

Carpentier, an other scholar versed in history of Jainism, holds[11] 'that Pālaka of Avaṇti was a contemporary of Mahāvira'. The story of Vāsavadattā, Pālaka's sister, who married Udayana, the king of Vaṭṣa, is well known. As Udayana, in his turn, was a contemporary of Buddha and of Mahāvira, the same holds for Pālaka of Avaṇti. For this reason, Carpentier can not believe that Pālaka commenced his reign only after the death of Mahāvira. As a solution of the problem he suggests that the later Jain tradition confused Pālaka of Avaṇti with Haṣtipālin, the king of Pāva, the town where Mahāvira died.

In the defence of the 155 years hypothesis of Hemachandra, third argument has come from the Belgian scholar P.H.L. Eggermont. Prof. Eggermont says[12]: 'In short both scholars, Jacobi as well as Carpentier, do not attach any value to the Jain tradition which made the year of Mahāvira's death concur with that of the anointment of Pālaka of Avaṇti. Their argumentation, it is true, seems to be correct'. If Hemachandra places 155 years between the death of Mahāvira and the anointing the Chandragupta and if Merutuṇga assumes the same period to be 60 years longer, attributing those 60 years to a king Pālaka, all evidences seem to indicate that those 60 years were inserted only afterwards by the author, Merutuṇga, who lived two centuries after Hemachandra.[13] However, I would like to show that there is still a possibility, neglected uptill now, which can save the Jain tradition used by Merutuṇga. Why should it is not possible that the 155 years' period between the death of Mahāvira and the anointing of Chandragupta included the very 60 years of Pālaka's reign ? In other words, the possibility remains that Pāiaka and Nandas did not succeed each other, but that they reigned contemporaneously for the first 60 years, commencing their reigns, both Pālaka as well as the Nandas, in the year that Mahāvira attained Nirvāna. This last supposition is confirmed by the another datum in the Parisistaparvan of Hemachandra.[14] In this work Hemachandra relates a story about the death of Kunika alias Ajātshatru, and the succession by Udāyin, the founder of Pātaliputra. After a successful reign Udāyin's life attained its end. A

certain prince wanting to take vengeance on Udāyin succeeded in getting access to the palace in the disguise of a Jain monk and murdered him. As Udāyin did not have any heirs, the five ministers set out to look for a qualified successor. At last they chose Nanda who was the son of a barber and a courtesan. As is stated emphatically by the author,[15] 'Nanda was anointed exactly 60 years after the death of Mahāvira'. Prof. Eggermont further reduces the figure of 155 years by 4 'Sham' years (inserted by Hemachandra, the difference of 3 years 8 months and half a month between the death of Mahāvira and the beginning of Duṣṣamākāla[16]) into 151 years (=469B.C.-318 B.C.) for the Nandas.

All the three, mentioned above, defence counsels who defended the 155 years theory of Hemachandra, as I have understood, have a firm belief that Hemachandra's Parisistaparvan possess the oldest data i.e. the lack of 60 years rule of Pālaka which was inserted by the Merutuṇga, two centuries later in order to solve some chronological problem or to make a synchronism with some other data. But actually Hemachandra's (1088-1170 A.D.) 155 years tradition seems to be the alone. Because, not only the later data furnished by the Merutuṇga (*c.* 1304 A.D.) but also the earlier Jain traditions given in Jinasena's Harivaṃsa Purāna (783-84 A.D.), Tiloya Paṇanati (Triloka Prajñapti *c.* 455 A.D.) and a number of earlier Pattāvalis possess the 60 years rule of Pālaka before the 155 years of Nanda. On adding 4 'Sham' years, Jain data assigns (60+155+4=) 219 years period between the death of Mahāvira and the anointment of Chandragupta Maurya as exactly mentioned in the Khartaragachcha Jain Pattāvali.[17]

Digaṃbara Jain author Jinasena's Harivaṃsa Purāna,[18] written in 705 Śaka era (783-84 A.D.) tells us explicitly :

वीर निर्वाण काले च पालकोऽत्राभिषेक्ष्यते ।
लोकेऽवन्ति सुतो राजा प्रजानां प्रतिपालक: ।। 83

षष्टिर्वर्षाणि तद्राज्यं ततो विजय भूजुजां ।
शतं च पंचपंचाशद् वर्षाणि तदुदीरत: ।। 84

At the time of Mahāvira's nirvāna, Pṛithvīpālaka (King of Avaṇti's son) king Pālaka would be coronated on earth. He (ruled) for 60 years. And then it is stated that the kings of country (or victorious kings) would rule for 155 years.

Tiloya Paṇanati[19] (i.e. Triloka Prajñapati) written by Yati Vṛishabha, after 1000 AV (i.e. after 455 A.D.) in his 4th Mahā-adhikār (Manuṣyaloka), gāthās 1476-1510 gives a detailed account of events after the death of Mahāvira upto the beginning of Chaturmukha Kalkirāja. Gāthā 1474 tells that Duṣṣamā kāla began 3 years 8 months and 1 Paksha, after the death of Mahāvira on Kārtika Amāvaṣyā of 545 B.C., which should coincide Ashādha Shukla Pūranimā of 541 B.C. Triloka Prajñapti also tells us that after the death of Mahāvira, Pālaka ruled over Avaṇti for 60 years and then 155 years by the Vijaya (Victorious Nandas) Vaṃsa.

According to the Jain chronology, given in the Pṛākrit Pattāvali named as Dussamākāla-Shṛamnasaṃgha Stva of Dharma ghosa Suri;[20] Mahābira's death and the death of king Chanda Pṛadyōte of Ujjaini occurred in the same night. After Chanda Pṛadyota, Pālaka coronated in Ujjaini. After the death of issueless king Udāyi of Magadha, Pālaka of Ujjaini captured the throne of Magadha for 60 years and then Nav-Nandas ruled for 155 years over Magadha and Ujjaini. The statement concerning the 60 years rule of Pālaka king of Ujjaini hints about two clues :

(i) Pālaka of Ujjaini ruled for 60 years after the death of Mahābira and Chanda Pṛadyōte and simultaneously also;

(ii) Pālaka of Ujjaini ruled for 60 years over Magadha after the death of issueless Magadhana king Udāyi.

At first sight, it seems that this Pattāvali equates the death of issueless Magadhan king Udāyi with the same epoch with which the Jaina tirthaṇkar Mahābira and Chanda Pṛadyōta of Ujjain died. Only then Pālaka king of Ujjain who coronated just after the death of king Chanda Pṛadyōte can rule 60 years over Magadha after the death

of issueless king Udāyi. Buddhist chronology Mahāvaṃsa placed the death of king Udāyi precisely in 483 B.C. In all probability, Canton dotted record with reference to Buddha's Nirvāna saṃvata took the death of king Udāyin in 483 B.C. and equated it with the death of Buddha, Mahābira and Chanda Pṛadyōte as the said Jain Pattāvali seems to be intended.

Actually, the said Jain Pattāvali does not intended to say the above mentioned theory but it gives two chronological clues by the single statement :

(i) Pālaka of Ujjaini ruled for 60 years after the death of Mahābira and Chaṇda Pṛadyōte over Avaṇti. In all certainty, in this statement, it was, originally intended that kings of Pṛadyōta dynasty ruled for (545–484 B.C.=) 60 years over Avaṇti but when the defeat of issueless king Udāyin of Magadha was annexed in this statement and those Jain traditions which accepts the Purānic data 467 B.C. for the death of Udāyi might fix the wrong date (467 B.C.–60 years=) 527 B.C. for the death of Mahābira and Chaṇda Pṛadyōte. And still those, who equated the death of king Udāyin in 467 B.C. with the death of Mahābira, can fix the wrong death date of Mahābira in 467 B.C. as Jacobi, Carpentier and Hemachandra in Parisisthaparavan intended by giving only 155 years interval between the death of Mahābira and the coronation of Chandragupta Maurya.

(ii) Pālaka of Ujjaini (i.e. kings initially belonged to Ujjaini) ruled for 60 years over Magadha throne after the death of issueless king Udayin of Magadha. We can interpret this clue as follows : Śiśunāga initially captured the Ujjaini throne in 483 B.C. from the hands of last Pṛadyōta king Nandivardhana and finally captured the Magadha throne in 467 B.C. from the hands of Udāyin of Magadha. Since, Śiśunāga initially captured Ujjaini throne, therefore, he might be designated as the Pālaka (i.e. Pṛajā-Pālaka or king) of Ujjaini. Śiśunāga took throne of (Magadha) in 467 B.C. and according to Buddhist Ceylonese Chronicle (Mahāvaṃsa) Śiśunāga dynasty ruled for [18 years (Śiśunāga)+20 years (Kālāshoka)+22 years (10 sons of Kālāshoka)=] 60 years over Magadha after the issueless king Udāyi.

VI.1.9. *Second Buddhist Council of Vaishālī*

Concerning the second Buddhist council at Vaishālī, it is said to be held after 10 years (and a half month additional– Dīpavaṃsa 4/44) of the reign of king Kālāshoka whose reign, we have finally decided to 444 B.C.-424 B.C. Therefore, 10 years of the reign of Kālāshoka should be coincided with (444 B.C.+10 years=) 434 B.C. We have already given, on the authority of Buddhist sources, the date 544/543 B.C.[21] for the death of Buddha in the 8th year of Ajātshatru's reign. On taking 544 B.C. for Buddha's death, the second council of Vaishālī must be convened in (544–434 B.C.=) 110 pBm (post Buddham mortuum). Ceylonese chronicle held that the Vaishālī council was convened about a century after the Buddha's Nirvāna.[22] Chinese and Tibetan records[23] tells explicitly about the exact epoch i.e. 110 pBm in coincidence with all the chronological calculation given in this work.

Thus we can construct finally the Magadha kings list, best to suit with the various data available in Purānas, Buddhist and Jain sources, for the post Bārhadṛathas but pre-Nanda kings as follows :

TABLE XIII

S. No.	*Names of King*	*Christian calendar period*	*No. of years*
1.	Kṣhemadharma	639-603 B.C	36
2.	Kṣhemajit or Kṣhetrajña	603-579 B.C.	24
3.	Bimbasāra	579-551 B.C.	28
4.	Ajātshatru	551-524 B.C.	27
5.	Darśaka or Nāgadāsaka	524-500 B.C.	24
6.	Udāyi	500-467 B.C.	33
7.	Śiśunāga) Mahā-	467-444 B.C.	23
8.	Kākavarṇa) nandi	444-424 B.C.	20
		639-424 B.C.	215

LP (Skt.)	*Yrs.*	*Divy/Aśāv*	*Dīp/Mhv*	*Yrs.*	*Purāṇas*	*Yrs.*	*Jaina*	*Mañjuśrīm*	*Yrs.*
					Sisunāga	40			
					Kākavarṇa	36			
					Kṣemadharman	20			
			Bhāṭiya/Bidhisa		Kṣatraujas	40			
		Bimbisāra	Bimbisāra	52	Bimbisāra	28	Bimbisāra	Bimbisāra	
		Ajātaśatru	Ajātasattu	32	Ajātaśatru	25	Kūṇika	Ajātaśatru	
		Udāyibhadra	Udayabhadda	16	Daśaka	25	Udāyin	Udāyin	20
		Muṇḍa	Anuruddha	8	Udāyin	33			
		Kākavarṇin	Muṇḍa		Nandivardhana	40			
		Sahalin	Nāgadāsaka	24	Mahānandin	43			
	↑	(Saphala)							
	350	Tulakuci	Susunāga	10(18)					
		Mahāmaṇḍala	Kālāsoka	28					
Prasenajit	7	Prasenajit	10 Sons of Kālās	22					
Nanda	10	Nanda	9 Nandas	22	Mahāpadmananda	88	9 Nandas		
Candra	1				and 8 Sons	12			
Parvata	1								
Candragupta	25 (7m)		Candagutta	24	Candragupta	24	Candragupta		
Bindusāra	25 (5m)	Bindusāra	Bindusāra	28	Bindusāra	25	Bindusāra		
Aśoka	36	Aśoka	Aśoka	37	Aśoka	36	Aśoka	Aśoka	87
Sabhāmpati	18	Saṃpadi (n)			Kunāla	8	Samprati	Viśoka	76
Dṛḍhadhanu	15	Bṛhaspati			Bandhupālita	8		Sūrasena	17
Satadhanu	14	Vṛṣasena			Daśona (Indrapāl)	7		Nanda	67
Bṛhadratha	13	Puṣyadharman			Daśaratha	8		Candragupta	
Puṇyaśarman	24	Puṣyamitra			Saṃprati	9		Binduvārasa	
					Sālisūka	13			
					Devadharman	7			
					Satadhanu	8			
					Bṛhadratha	7 (87)			
Puṣyamitra	24				Puṣyamitra	36			

VI.2. POST BĀRHADṚATHA KURU KINGS

In section V.1, we have analysed the Kuru kings-list for 36 kings from the birth of Parīkṣhit-II up to the end of Bṛahadratha dynasty in Magadha. The 36th kuru king 'Dhruva' (or a generation on either side) might be the near contemporary to the last Bṛahadratha king Repuñjaya. Therefore, Tigmātman and Bṛahadratha, the 37th & 38th Kuru kings, might be the contemporary to the Kṣhemadharma, the grand father of Bimbasāra. Vasudāna with Kshatṛojā and Śatānīka-II Paraṃtapa with Bimbasāra. Udayna, the 41st Kuru king of Kośāṃbi was certainly contemporary to the Ajātshatru and Darśaka of Magadha; Prasenajit and Vidudabha (or Kṣudraka) of Srāvaṣti and Chanda Pṛadyōte and Pālaka of Avaṇti. This synchronism can be achieved through his matrimonial relations and other statements. We are told that Darsaka, the son of Ajātshatru, was the king of Magadha and his sister Paḍmāvati was married to Udenā (Udayana) of Kośāṃbi.[24] Kathāsariṭasāgara makes Udayana of Kauśāṃbi a junior contemporary of Chanda Pṛadyōte of Avaṇti. Since Pṛadyōta's daughter Vāsvadattā was married to the Udayana.[25] And Bhāsa in his celebrated Svapṇavāsvadattā also affirm this fact. According to Ratnāvali, Udayana of Vaṭṣa (Kauśāṃbi) attacked over the Kṣūdraka, the son of Kośala king Prasenajit and killed him. After Udayana, according to Purānas, 4 insignificant kings—Vahīnara, Daṇḍapāṇi, Niramitra and Kṣhemaka

TABLE XIV

S. No.	*Kuru kings-list*	*Contemporary*	*Magadha list*
37.	Tigmātman	Kṣhemadharma	(639-603 B.C.)
38.	Bṛhadratha		
39.	Vasudāna	Kṣhatrojā	(603-579 B.C.)
40.	Śatānīka II	Bimbasāra	(579-551 B.C.)
41.	Udayana	Ajātshatru	(551-524 B.C.)
42.	Vahīnara	Darshaka	(524-500 B.C.)
43.	Daṇḍapāṇi	Udāyi	(500-407 B.C.)
44.	Niramitra		
45.	Kṣhemaka	Śiśunāga	

ruled. This dynasty might perhaps ended with Kṣhemaka by the Śiśunāga during his stormy victories from Avaṇti to Magadha just before the capture of Kāshi, at any time during 484-467 B.C.

The complete analysis of Kuru kings reveals that the actual number of Kuru kings from Parīkṣhit-II up to the Kṣhemaka were not 29 as Purānic lists tell but was, in reality, the 45, that is a clear missing of at least (45-29=) 16 kings i.e. a period of approximately (16×20=) 320 years.

VI.3. POST BĀRHADṚATHA PERIOD AIKŚVĀKU KINGS

In sec. V.3, have already analysed the Aikśvāku kings-list for 24 kings after Bṛhadbala, contemporary king to the Mahābhārata war up to Śuddhōdana, the 24th king after Bṛhadbala. Bārhadṛatha dynasty ended in 639 B.C., when the 24th king Śuddhōdana ruled over Kośala country at Kapilvaṣtu. This king Śuddhōdana had an exceptionally long reigning period. He was the contemporary to the last Bārhadṛatha king Repuñjaya ended in 639 B.C.; Kshemadharma, the grand-father (639-603 B.C.) and Kshatrojā (603-579 B.C.) the father of Bimbasāra. After Śuddhōdana, the grand-son Rāhula ruled for 584-546 B.C. Mahākośala, the king of Srāvaṣti, was thus the junior contemporary to Śuddhōdana and senior contemporary to Bimbasāra and Rāhula, because, according to Buddhist sources, Mahākośala married his daughter Kośaladevi to Bimbasāra and gave Kāshi district as dowry.[26] Pṛasēnajit was the senior contemporary to Ajātshatru, because according to Buddhist sources, Pṛasēnajit also married his daughter Vajṛā or Vājirā, to Ajātshatru.[27] The 27th Aikśvāku king Viruḍdhaka or Vidūḍabha (Kṣudraka of Purānas) was the son of Pṛasēnajit (and his queen Mallika, who belonged to Śakya-kula as a maid-servant, according to Tibetan tradition). When he became adult then he made conspiracy with the help of ministers and subjugated his father Prasēnajit from the Aikśvāku throne. Pṛasēnajit ran away towards Magadha to seek the help of Ajātshatru but died in the way.[28] Kṣudraka or Viruḍdhaka also attacked over Śākya country Kapilavaṣtu two years before the Buddha's death 77,000 Śākyas were killed in the battle probably under the leadership of Rāhula and consequently Śākya republic was now absorbed in Kośala

kingdom.[29] Soon after this victory, according to Ratṇāvali, Vaṭṣa king Udayana attacked over the Kośala kingdom of Srāvaṣti and killed probably the Viruḍḍhaka or Kṣhudraka. After Kṣhudraka, three insignificant kings—Kulaka, Suratha and Sumitra ruled over Aikśvāku kingdom. It is not certain to give a precise date for the defeat of Aikśvākus by the Magadha but it can be assumed that it should be happened during 484-467 B.C., when the army of Śiśunāga were trying to reach to the Magadha kingdom. We have finally informed from a reference in the Kathāsariṭasāgara to Naṇda's camp in Ayōdhyā that Kośala formed a part of Magadha.

TABLE XV

S. No.	*Aikśvāku kings-list*	*Contemporary Magadha list*
24.	Śuddhōdana	Repuñjaya
		Kshemadharma
		Kshatrojā
25.	Rāhula	Biṃbaśāra
26.	Kṣhudraka	Ajātshatru
27.	Kulaka	Darshaka
28.	Suratha	Udāyi
29.	Sumitra	Śiśunāga
	Śiśunāga	Śiśunāga

REFERENCES

1. All the Jain sources unanimously give 60 years for Palaka rule over Ujjaini after the death of Mahābīra and Chanda Pṛadyōta.
2. A large number of scholars hold that Pṛadyōtas. in reality, never ruled in Magadha. Few of them mentioned here e.g. Ray Chaudhari, Pol. Hist. of Ant. India (VII ed.), 1970, pp. 102 and 131; Rangacharya, Pre-Musalaman India, Vol. II, pp. 219, 343-345; D.R. Bhandarkar, The Carmichel Lectures, 1918, pp. 64-68; Sita Nath Pradhan, Ant. India, pp. 232-237; Cambridge History of India, Vol. I, pp. 310-311; Dr. Bhandarkar, "Notes on the Ancient History of India", Indian Culture,

Vol. I, pp. 15-16; Aiyar, "The Ancient History of Magadha", Indian Antiquary, Vol. XLIV, p. 43; Vol. XLV, p. 8; P.L. Bhargava, India in Vedic Age, 2nd ed., pp. 203-204; Indian Antiquary, 1914, p. 219; K.P. Jayaswal, JB & ORS, Vol. I, 1915, pp. 64, 68 and 111, all maintain that the Pṛadyōta dynasty was only in Avaṇti, never in Magadha.

3. Oldenberg, H., Dīpavaṃsa, 3/58.
4. Ibid., 3/56.
5. Ibid., 3/53.
6. Ibid., 3/59.
7. Vincent Smith, Early History of India, Appendix on Chronology, referring to his controversy with Prof. Geiger, observes :
   "I have read carefully Professor Geiger's introduction to his translation of the Mahāvaṃsa (1912), but find no reason to alter my opinion on the matter in the controversy between us. The case of king Darshaka (ante p. 39) illustrates the inferiority of the Mahāvaṃsa list of early Indian kings is compared with the Purānic list. Traditions preserved in Magadha should be more trustworthy than those recorded at a latter date by monks in distant Ceylon." On p. 39 fn. 1 combating (trans. 1912, pp. XLIV; XLV) Geiger, V. Smith states : "the daughter of Mahāsena was the queen of king Udayana whose realm of Vaṭṣa probably was identical with Kaushāṃbi. Padmāvati was the sister of Darshaka and Pṛadyōta, king of Avaṇti, presumably, a son of Mahāsena, is represented as seeking for her hand (Jacobi, transl. of Vasvadatta in Intern. Monatschr. for Wissenschat. March 1913). The discovery goes a long way to support the authority of Purānas. According to Dr. R.S. Tripathi, Hist. of Ant. India, p. 90 : Pṛadyōta was known as Mahāsena on account of his large army.
8. Pandey, Rajabali, Prāchīna Bhārata, pp. 133; Mahajana, V.D., Ancient India, p. 217.
9. Corpus Inscriptionum Indicarum, Vol. II, part I, Kharosthi Inscriptions, ed. Sten Konow, Calcutta, p. XXVIII; Bühler, G., Indian Antiquary, Vol. II. p. 362.
10. Jacobi, H., The Kalpasūtra of Bhadravāhu, Abhandlungen fur die Kunde des Morgenlands, VII. Band, No. I, Leipzig, 1879; pp. 8 & 9.
11. Carpentier, J., 'The Date of Mahāvīra', Indian Antiquary, Vol. X, LXIII, 1914, p. 122.
12. Eggermont, P.H.L., The Purāna Source of Merutunga's list of Kings pp. 69-71, Oriental Monograph Series, Vol. IV, Leiden, 1968.

13. With the exception of Shantilal Shah, 'The Traditional Chronology of the Jainas', Bonner Orientalistische Studien, Ḥeft 9, Stuttgart 1935, p. 32 : 'Thus the 60 years assigned to the rulers of Avanti (Pālaka) in the Jain tradition are not a fiction nor an interpolation.

14. Parisisthaparvan, VI, 21 sqq.

15. Parisisthaparvan, VI, 243.

16. Jacobi, H., The Kalpasutra of Bhadravāhu, verse 147.

17. Jayaswal, K.P., JB & ORS, Vol. I, 1915, p. 99; Dr. Hoernle, Indian Antiquary, XI, 246.

18. Gupta, P.L., Gupta Sāmrājya, pp. 116-17.

19. Jain, H.L., Bhārtīya Saṃskṛiti me Jain Dharma kā Yogadāna, pp. 96, 128-130.

20. Jain, H.L., Bhārtīya Saṃskṛiti me Jain Dharma kā Yogadāna, p. 29.

21. Radhakrishanan, S., 2500 Years of Buddhism, Forward, p. V, gives this date by citing the reference of Bodha-Gaya inscription. Ceylon-Burma-Siam tradition also gives 544/543 B.C. date for Buddha's Mahāparinirvāṇa.

22. Oldenberg, H., Dīpavaṃsa, 4/47.

23. Bapat, P.V. (Gen. ed), 2500 Years of Buddhism, p. 44.

24. Tripathi, R.S., Hist. of Anc. India, p. 108, fn. 2; Vincent Smith, Early History of India, p. 39, fn. 1.

25. Nirnaya Sagar Press ed., p. 33; also see : Penzerand Tawney, The Ocean of Story, Vol. I, pp. 122-128 for an English translation of the Story; For a Hindi translation, see : Ram Krisna Verma's trans. p. 83 ff; see also Mrichchhakatika, X, 47; Compare Ch. IV, pp. 175-78; Ch. X, Vs. 51, 46; I, 504-05; Kathāsaritasāgar, CXII, 13; Binode, "Pṛadyōtas the kings of Magadha and Ujjain" in Antique Review, Vol. V, p. 68. Udenavatthu informs us how once, after being captured...perhaps in war...by Pajjota (Pṛadyōta) of Avanti, Udena eloped by a clever ruse with his rivals daughter, Vasuladatta or Vasvadatta and married her in his capital... Tripathi, R.S., Hist. of Ant. India, p. 89.

26. Buddhikee Sukar Jataka no. 283 and also see Tripathi, Hist. of Ant. India, p. 93.

27. Jataka no. 283 and 492; also see : Tripathi, Hist. of Ant. India, p. 95.

28. Tripathi, R.S., Hist. of Ant. India, p. 92 : Indeed Pasendi lost his throne on account of the revolt of his son Vidudabha (Viruddhaka) instigated by the minister Digha-Charayana. Pasendi invoked Ajātshatru's aid, but before entering Rājagriha, the Kośala king died of fatigue and anxiety at its gate, Ajātshatru greeted him by a state funeral and wisely left Vidudabha undisturbed.
29. Bapat, P.V. (Gen. ed.), 2500 Years of Buddhism, p. 28.

7

Chronology of Nanda Dynasty

VII. 1. MAHĀPADMA NANDA : THE DESTROYER OF ALL THE KSHATRIAS ?

महानन्दिसुतश्चाऽपि शूद्रायां कलिकांशजः ।
उत्पत्सयते महापद्मः सर्वंक्षत्रांतको नृपः ।

ततः प्रभृति राजानो भविष्याः शूद्रयोनयः ।
एकराट् स महापद्मः एकच्छत्रो भविष्यति ॥

(*Vāyu Pur.*, Ch. XCIX, 326-27; *Matsya Pur.*, Ch. 270, 18-19; *Brahmānda Pur.; Upodghatapada*, Ch. LXXIV, 139-40; *Dynasties of Kali Age*, p. 25)

It will be clear from the above mentioned and other numerous versions given in various important Purānas, which are practically identical with one another, that the founder of this dynasty was Mahāpadma, that he was the son of Mahānaṇdin (i.e. of the Śaśunāgas), that he was born from a Sudra-mother (a wife of Kālāshoka), that he was most avaricious and powerful, that he extirpated the Kshatriya rulers of his time like a second Paraśurāma, the destroyer of all the Kshatriyas in the olden time of Tṛetā yuga, that he subjuga-

महानन्दिनस्ततः शूद्रगर्भोद्भवोऽतिलुब्धोऽतिबलो महापद्मो नन्दनामा
परशुराम इवाऽपरोऽखिल क्षत्रांतकारी भविष्यति

(*Viṣhṇu Purāna*, IV, XXIV, 20)

स एकच्छत्रां पृथ्वी मनुल्लंघित शासनः ।
शासिष्यति महापद्मो द्वितीय इव भार्गवः ।।

(*Bhāgwata Purāna*, Sk. XII, Ch. II, 10)

ted the different lines of kings of the Solar and Lunar dynasty who began to rule in the various parts of northern India from the time of Mahābhārata war. This view is also corroborated by the Jain source Parisistha Parvaṇ 7/81.

The above mentioned Purānic contention concerning the personage of Mahāpadma Nanda actually corroborated with the kings-list of post Mahābhārata war period which is logically analysed in Ch. V and VI of my present work. This list of contemporary dynasties means therefore all the old Kshatriya dynasties, which reigned from the time of the great-battle till they and the Śaśunāgas (i.e., Mahānaṇdin) in Magadha were swept away by the Nandas. As regards the total destruction of Kshatriya kings listed in early contemporary dynasties—DKA, p. 69 at a time by Mahāpadma's own effort, as Pargiter assumed, does not proved true on the closer look of the history of ancient India from Biṃbasāra to Mahāpadma Nanda. Aṇga and Kāśi were in the control of Magadha from the period of Biṃbasāra,[1] Vaishāli Republic and Malla kingdom from Ajātshatru,[2] Vaṭṣa. (Kurus of Kaushāṃbi) and Avaṇti were probably taken by Śiśunāga.[3] But it is confirmed that under the sway of Mahāpadma Nanda, beside the kingdoms already mentioned, Aikśvākus (Ayōdhyā),[4] Haihayas (Māhiṣmatī),[5] Kaliṇgas,[6] Sūraśena (Mathurā),[7] and Aṣmakas[8] etc. are also already came. And with these regions, Mahāpadma Nanda may really be considered as the single sovereign power of the whole India.

The names of nine Nandas in Mahābodhivaṃsha[9] and in Bhaviṣya Purāna[10] as follows :

TABLE XVI

S. No.	*Mahābodhivaṃsha*	*Bhaviṣya Purana*
1.	Ugrasena	Nanda Suta
2.	Paṇduka	Pṛa-Nanda
3.	Paṇdugati	Parā-Nanda
4.	Bhūtapāla	Samā-Nanda
5.	Rāstrapāla	Priyā-Nanda
6.	Govishanāka	Devā-Nanda
7.	Dasaisddhaka	Yajña Bhanga
8.	Kaivarta	Mauryā-Nanda
9.	Dhana	Maha-Nānda

The Purānas refer to 9 Nandas who ruled for 100 years. Tārānāth, the Tibetan monk, mentions 29 years; Buddhist Ceylonese chronicle unanimously assigned 22 years only for 9 Nandas whereas all the Jain Pattāvalis and literatures give 155 years for the same.[11] Nanda dynasty chronology often puts a zigsaw puzzle before the modern scholars. Here we try to analyse the available data in order to achieve better results.

VII. 2 PURĀNIC CHRONOLOGY

Various Purānas mention the chronology of nine Nandas as follows :[12]

महापद्मस्तत्पुत्राश्च एकं वर्ष शतं अवनीपतयो भविष्यन्ति ।।

(*Viṣṇu*, IV, XXIV, 25)

य इमां भोक्ष्यन्ति महीं राजानः स्म शतं समाः ।
नवनन्दान् द्विजः कश्चित्प्रपन्ना नुद्धरिष्यति ।।

(*Bhāgwata*, Sk. XII, Ch. II, 11)

एकराट् स महापद्मः एकच्छत्रो भविष्यति ।
अष्टाशीति स वर्षाणि पृथिव्यां तु भविष्यति ।। 20
सर्वक्षत्र मथोऽत्साद्य भाविनार्थेन चोदितः ।
सुमाल्य सुताह्यष्टौ समाद्वादश ते नृपाः ।। 21
कौटिल्यश्चन्द्रगुप्तं स ततो राष्ट्रेऽभिषेक्ष्यति ।
भुक्तवा महीं वर्ष शतं ततो मौर्यान् गमिष्यति ।। 23

(*Matsya*, 270, 20-23)

अष्टाशीतितु वर्षाणि पृथिवीं पालयिऽयति ।
सर्वक्षत्रं समुद्रधृत्य भाविनोऽर्थसय वै बलात् : ।। 14i

तत्पश्चात् तत्सुताह्यष्टो समा द्वादश ते नृपाः ।
महापद्म पर्याये भविष्यन्ति नृपाः क्रमात् ।। 142

उद्धरिष्यति तान् सर्वान् कौटिल्यो वै द्विजर्षभः ।
भुक्तवा महीं वर्ष शतं नरेन्द्रः स भविष्यति ।। 143

(*Brahmānda*, Upodghatapada, Ch. LXXIV, 141-43)

अष्टाशीतितु (अष्टाविंशाति) वर्षाणि पृथिवीं पालयिष्यति ।
सर्वक्षत्र मथोद्धत्य भाविनोऽर्थस्य वै बलात् ।। 328

सहत्य तत्सुता ह्यष्टो समाद्वादश ते नृपा ।
महापद्मस्य पर्याय भविष्यन्ति नृपाः क्रमात ।। 329

उद्धरिष्यति तान् सर्वान् कौटिल्यो वै द्विजर्षभः ।
भुक्तवा महीं वर्ष शतं नरेन्द्रः स भविष्यति ।। 330

(*Vāyu*, XCIX, 328-330)

It is clear from these chronological passages, taken from various important Purānas, that Mahāpaḍmananda ruled the Magadha kingdom under the one umbrella for a period of 88 years. Some manuscripts of Vāyu Purāna, though mentions 28 years only and modern scholars often prefer this figure in order to reduce the Purānic chronological blunders. But because these manuscripts, in particular, too gives the total 100 years for Nandas, therefore, 28 years figure for Mahāpaḍmananda, conclusively, seems to be the copiest's mistake. After 88 years rule of Mahāpaḍmananda, according to Purānas, his 8 sons jointly ruled the kingdom for a short period of 12 years. Therefore, these nine Nandas, including the father and his eight sons ruled Magadha for a period of (88+12=) 100 years. In sec. VI.1.7, we have concluded that Kākavarṇa or Kālāshoka ended in 424 B.C. According to Greek historians, Kālāshoka was murdered by the Ugrasēna, the Mahāpaḍmananda. Therefore, we can give the Purānic period (424-324 B.C.=) 100 years for the Nanda-dynasty rule over Magadha kingdom.

Here we can verify our analysis of Purānic chronology with the help of Purānic statements concerning the interval between the birth of Parīkṣhit II and the coronation of Mahāpaḍmananda which is given as 1015 or 1050 years in the following Purānic versions :[13]

यावत् परीक्षितो जन्म यावन्नदाभिषेचनम् ।
एतद् वर्ष सहस्त्रन्तु ज्ञेयं पञ्चदशोत्तरम् ॥ *Vāyu* 94.15

यावत् परीक्षितो जन्म यावन्नन्दाभिषेचनम् ।
एतद् वर्ष सहस्त्रन्तु ज्ञेयं पञ्चदशोत्तरम् ॥ *Maṭṣya*

महापद्माभिषेकात्तु यावज्जन्म परीक्षित: । *Maṭṣya* 273.35
एक वर्ष सहस्त्रन्तु ज्ञेयं पञ्चाशदुत्तरम् ॥ (Variant)

महादेवाभिषेकात्तु यावज्जन्म परीक्षित: ।
एक वर्ष सहस्त्रन्तु ज्ञेयं पञ्चाशदुत्तरम् ॥ *Vāyu* 99.40 (Variant)

महानन्दाभिषेकान्म जन्म यावत् परीक्षित: । *Bṛahmānda*
एतद् वर्ष सहस्त्रन्तु ज्ञेयं पञ्चाशदुत्तरम् ॥ II.3.74.227

आरभ्य भवतो जन्म यावन्नन्दाभिषेचनम् ।
एतद् वर्ष सहस्त्रन्तु शतं पञ्चदशोत्तरम् ॥ *Bhāgwata*, 12.2.21

यावत् परीक्षितो जन्म यावन्नदाभिषेचनम् ।
एतद् वर्ष सहस्त्रन्तु ज्ञेयं पञ्चदशोत्तरम् ॥ *Viṣhṇu* IV, 24,24

पञ्चाशदुत्तरम् ॥ *Viṣhṇu* IV, 24,104

पञ्चशतोत्तरम् ॥ *Viṣhṇu* IV, 24,104

In our analysis under the 18 days (revised) war theory, Mahābhārata war and the birth of Parīkṣhit took place in 1339/1338 B.C. Bārhadṛathas ruled for 700 years+Pṛadyōtas and Śaśunāgas (Mahānandin) ruled for 215/214 years+Nandas ruled for 100 years=1015 years period between the birth of Parīkṣhit-II and the end of Nanda dynasty. This 1015 years period exactly tallies with one of the figures, i.e., 1015 years, of Purānic versions given as the interval between the birth of Parīkṣhit-II and the coronation of Maḥāpaḍmananda. Why the Purānic statements selected the figure '1015 years interval from Parīkṣhit's birth up to the coronation of Mahāpaḍmananda' which

was the actual interval up to the end-epoch of Nanda dynasty ? It was really a very difficult problem if we have not possessed luckily the Magadha kings-list given in Bhaviṣya Purāna which runs as follows[14] :

वलभद्रस्तदा तुष्टो यज्ञ भावेन भावित: ।
शिशुनाग: ऋतोज्जातो वलभद्रांशसं भव ।। 26
शत वर्ष कृतं राज्य काक्वर्ण सुतोऽभवत् ।
तद्राराज्यं नवतिवर्ष क्षेमधर्मा ततोऽभवत् ।। 27

दशहीनं कृतं राज्यं तत्क्षत्रौजास्त्सुतोऽभवत् ।
दशहीनं कृतं राज्यं वेदमिश्रस्ततोऽभवत् ।। 28

दशहीनं कृतं राज्य तयोऽजातीरपुस्सुत: ।
दशहीनं कृतं राज्यं दभकस्तनयोऽभवत् ।। 29

दशहीनं कृतं राज्यं नन्दवर्धन एवं तत् ।
दशहीनं कृतं राज्यं नन्दवर्धन एव तत् ।। 30
दशहीनं कृतं राज्यं तस्मान्नंदसुतोऽभवत् ।
पितृस्तुल्यं कृतं राज्यं शूद्रीगर्भसमुद्भव: 31

नन्दाज्जात: प्रनन्दश्च दश वर्ष कृतं पदम् ।
तस्माज्जात: परानन्द: पितृस्तुल्यं कृतं पदम् ।। 32

तस्माज्जात: समानन्दो विंशोशद्वर्ष कृतं पदम् ।
तस्माज्जात: प्रियानन्द: पितृस्तुल्यं कृतं पदम् ।। 33

देवानन्दस्तस्त सुत: पितृस्तुल्यं कृतं पदम् ।
यज्ञभंङ्ग: सुतस्तस्मात्पितुरर्द्ध कृतं पदम् ।। 34

मौर्यानन्दस्तस्य सुत: पितृस्तुल्यं कृतं पदम् ।
महानन्दस्ततौ जात: पितृस्तुल्यं कृतं पदम् ।। 35

(*Bhaviṣya*, Pratisarga Parva, 6/26-35)

At first sight, Bhaviṣya Purāna list shows a very poor chronological performance for the Śaśunāga dynasty as follows:

TABLE XVII

(1)	Śiśunāga	100 years	(6)	Ajātīripu	50 years
(2)	Kākavarna	90 ,,	(7)	Darbhaka	40 ,,
(3)	Kṣhemadharmā	80 ,,	(8)	Udayāśva	30 ,,
(4)	Kṣhattṛojā	70 ,,	(9)	Nandavardhana	20 ,,
(5)	Vedamiṣra	60 ,,	(10)	Nanda Suta	20 ,,

But, if we put the first two kings—Śiśunāga and Kākavarṇa of the list at their actual historical place i.e. just after the end of Udayāśva and Nandavardhana then Bhaviṣya Purāna list can give much chronological help for the chronology of Śaśunāgas and Nandas after the king Udayāśva as follows :

TABLE XVIII

(1)	Kṣhemadharmā	100 years	(6)	Udayāśva	50 years
(2)	Kṣhattṛojā	90 ,,	(7)	Nandavardhana	40 ,,
(3)	Vedamiṣra	80 ,,	(8)	Śiśunāga	30 ,,
(4)	Ajātīripu	70 ,,	(9)	Kākavarṇa	20 ,,
(5)	Darbhaka	60 ,,	(10)	Nanda Suta	20 ,,

In this modified list, too, we find still no help from Bhaviṣya Purāna up to the reign of Nandavardhana and thus we discard the kings-list up to the Nandavardhana for practical purposes. We can thus deal with the modified chronological list of Bhaviṣya Purāna only from the king Śiśunāga and onward especially for the chronology of Nandas with which we are particularly related in this section. Concerning the reigning period of Śiśunāga plus Kākavarna over Magadha, we have given (23+20=) 43 years in sec. VI.1.7. On taking Maṭṣya Purāna's 26 years for Kākavarṇa, we can raise the total period for Śiśunāga plus Kākavarṇa over Magadha up to (23+26=) 49 years. Whereas modified Bhaviṣya list gives (30+20=) 50 years for the same.

After Kākavarṇa, Bhaviṣya list now mentions the king-name 'Nanda-Suta' for 20 years. In sec. VI.1.7, we have identified the term 'Mahānaṇdin' as the generic name for the Śiśunāga plus

Kākavarṇa, therefore, 'Mahānandi-Suta' or 'Nandi-Suta' or 'Nanda-Suta' might be equated with the 10 sons of Kālāshoka (of Mahānaṇdin dynasty) of Buddhist sources who ruled jointly for 22 years. According to Mahābodhivaṃsa,[15] the Bhadrasena was the eldest among them. Due to the bad nature, this Bhadrasena, the guardian ruler above his brothers (or more probably step-brothers) treacherously killed them and become the sovereign ruler[16] and also the founder of a new dynasty, the Nanda dynasty. Now he became defamed as Ugrasēna[17] instead of Bhadrasena due to his sinful activities and also due to his Sudra-mother origin. Therefore, the Nanda-Suta of Bhaviṣya Purāna list can be equated not only with the sons of Kālāshoka of Buddhist sources but also with the Ugrasena the first Nanda king, of Buddhist sources (Mahābodhivamsa) because all the three different names of a single person had almost the equal reigning period, i.e., 20-22 years. Modern scholars often equated this Ugrasena, the first Nanda king of Buddhist sources with the Mahāpaḍmananda, the most famous Nanda king of Purānas. For the purpose of the validity of this equation, we have now to analyse the Nanda dynasty list of Bhaviṣya Purāna which runs as follows :

TABLE XIX

(10)	Nanda Suta	20 years	(15)	Devā-Nanda	15 years
(11)	Pṛa-Nanda	10 ,,	(16)	Yajña Bhanga	$7\frac{1}{2}$,,
(12)	Parā-Nanda	10 ,,	(17)	Mauryā-Nanda	$7\frac{1}{2}$,,
(13)	Samā-Nanda	15 ,,	(18)	Mahā-Nanda	$7\frac{1}{2}$,,
(14)	Priyā-Nanda	15 ,,		TOTAL	$107\frac{1}{2}$ years

According to this list, Purānic Mahāpaḍmananda can more easily be equated with the last Nanda king, the Mahānanda rather than with any other Nanda king. It is also confirmed by the Brahmānda Purāna, II.3.74.227 version which deals with the interval between the birth of Parīkṣhit-II and the coronation of Mahāpaḍmananda where the name Mahānanda is clearly mentioned.

Concerning the Nanda dynasty chronology, Bhaviṣya Purāna list is again proved to be a poor assistant because it utilised a mysterious figure 'Viṃshōshadavarśa' as the reigning period of fourth Nanda king, the Samā-Nanda. The word 'Viṃshōshadavarśa' really plays a crucial role in the chronology of Nanda dynasty because the reigning periods of all the subsequent Nanda kings would be affected by the interpretation of this word. On the basis of external chronological evidences, 15±3 years may be given as the genuine interpretation of the word 'Viṃshōshadavarśa'. 15 years interpretation, for the word, gives a total of 107½ years for the total reigning period of Nine Nandas.

Now, we come to the point concerning the interval of 1015 or 1050 years between the birth of Parīkṣhit-II and the coronation of Mahāpadmananda. In our analysis, under the 18 days (revised) war theory, Mahābhārata war and the birth of Parīkṣhita-II took place in 1339/1338 B.C. Bārhadṛathas ruled for 700 years+Pṛadyōtas plus Śaśunāgas ruled for 215/214 years. It gives a total of 915/914 years up to the end of Kākavarna in 424 B.C. Now take 15 years interpretation theory for the word 'Viṃshōshadavarśa', which gives 100 years total of Nanda dynasty rule up to the coronation of last Nanda king of Bhaviṣya Purāna, the Mahānanda in (424 B.C.+100 years=) 324 B.C. In this way, we can achieve an exact synchronism with the (1339 B.C.-324 B.C.=) 1015 years Purānic interval between the birth of Parīkṣhit-II and the coronation of Mahāpadmananda. This Mahā-Nanda or Mahāpaḍmananda, the last Nanda king ruled for (324 B.C.-317 B.C.=) 7½ years. Thus in 18 days (revised) war theory, based on the 'era of Alexandria', Chandragupta Maurya should be coronated in 317 B.C. rather than the Original 324 B.C. date.

A majority of Purānas give precisely 100 years, a round figure, rather than the odd one i.e. 107½ years. It is perhaps due to the fact that Bhaviṣya Purānas uses 50 years period instead of 43 years i.e. (50-43=) 7 years excess for the Śiśunāga plus Kākavarṇa which should naturally be compensated in (107½-7 years=100½ years) the

Nanda dynasty rule 100 years total for Nandas can easily be obtained by using '13 years interpretation for the word Viṃshōshadavarśa' which gives actually 98½ years total. We can raise the figure 98½ years up to 100½ years by adding 2 years because Nanda Suta, the first Nanda king might have ruled for 22 years instead of 20 years, according to the Buddhist sources; if we equate Nanda Suta with the 10 sons of Kālāshoka. Maṭṣya Purāna also gives (700+221=) 921 years from the birth of Parīkṣhit-II up to the end of Kākavarṇa (by using 26 years instead of 20 years of Kākavarṇa reign) and '13 years for Viṃshōshadavarśa' gives precisely [42+(13×4)=] 94 years up to the coronation of Mahānanda which gives finally (921+94=) 1015 years (=1339 B.C.-324 B.C.). Mahā-Nanda, thus ruled (324 B.C.-317 B.C.=) 6½ years.

Some scholars may use the date 1362 B.C. for the beginning of Mahābhārata war, 723 years ruled by the Bārhadṛathas+214/215 years by Pṛadyōtas plus Śaśunāgas i.e. 937/938 years from the Mahābhārata war up to end of Kākavarṇa in (1362 B.C.+938 years=) 424 B.C. Now we take '18 years for Viṃshōshadavarśa interpretation', it gives 121 years total for the reign of nine Nanda and precisely 112 years of Nanda dynasty rule at the time of the coronation of the last king Maha Nanda. Thus in this theory, from the beginning of Mahā-bhārata war up to the coronation of Mahā-Nanda, there elapsed (723+215+112 years=) 1050 years. In the same '18 years for the Viṃshōshadavarśa theory', we can give 1015 years interval from the beginning of Mahābhārata war up to the coronation of the 6th Nanda king Devā-Nanda [723+214+(42+18×2)=] 1015 years if Vāyu 99/409(Variant) version's 'Mahādevā' is equated with 6th Nanda king Devā-Nanda. Though this figure also tallies exactly with one of the interval figures from Parīkṣhit to Mahāpaḍmananda of Purānas but because it gives (1362 B.C.+1050 years=) 312 B.C. for the coronation date of Mahā-Nanda and his end in (312 B.C.+9 years=) 303 B.C. Therefore 1050 years interval theory may not be applicable because, in this case, coronation of Chandragupta Maurya becomes at least 9/10 years lower than the lowest estimate (*c.* 313 B.C.).[18]

In 18 years original war theory, Parīkṣhit born at the night of 12th divine day i.e. in (1362-12=) 1350/1351 B.C. In this case, Bārhadṛathas may be allowed to rule 712 years over Magadha up to (1351 B.C.+ 712 years=) 639 B.C. Pṛadyōtas plus Śaśunāgas ruled for 215 years up to (639 B.C.+215 years=) 424 B.C. Thus Nandas up to the coronation of Mahā-Nanda can be allowed to rule only 88 years up to (424 B.C.+88 years=) 336 B.C. To achieve 88 years, we should give only 12 years for the term 'Viṃshōshadavarśa'. It gives only (336 B.C.-330 B.C.=) 6 years for Mahā-Nanda and a total of (88+6=) 94 years for Nanda dynasty rule. Though the end of Nanda dynasty rule i.e. the beginning of Chandragupta Maurya in 330 B.C. fully accords with one of the Jain tradition i.e. Chandragupta Maurya coronated (545 B.C.-330 B.C.=) 215 years after the death of Mahābira.[19] But because 215 years interval might actually be existed between the beginning of Duṣṣamā kāla (*c.* 539 B.C.) and Chandragupta Maurya (*c.* 324 B.C.), therefore, it would be more logical to expand the period of Mahā-Nanda from 6 years (Bhaviṣya Purāna figure) up to the 12 years. It gives (88+12=) 100 years (=424 B.C.-324 B.C.) rule for Nanda dynasty as majority of Purānas intended but in some what reversed form. Purānas intended that Mahāpaḍmananda, the first Nanda king alone ruled for 88 years and last 12 years by his 8 sons, but in our theory, the predecessors of Mahā-Nanda might have ruled for 88 years whereas Mahā-Nanda himself ruled only for 12 years.[20]

Thus in my concluding opinion, 1015 years interval figure is the most genuine than its rival figures viz. 1050 or 1500 years etc. If we use Śaka era beginning with 78 A.D. (i.e. reference era becomes Dhṛuva Saṃvata of Hindus b. 8508 B.C. or Era of Constantinople b. 5508 B.C.) then 1015 years interval covers the Christian calendar period 1351/1350 B.C.-336/335 B.C. and Nanda dynasty finally ended in 324 B.C. Whereas, on taking 101 A.D., the beginning of Śalivāhana Śaka era and 'era of Alexandria' as a reference then 1015 years interval covers 1339 B.C.-324 B.C. period and Nanda dynasty finally ended in 317 B.C.

By equating the Mahāpaḍmananda of Purānas with the last king Mahā-Nanda of Bhaviṣya Purāna list, it becomes also possible to give an exact synchronism with the 3030 years cycle of Sapṭa Rishi era. Viṣhṇu and Bhāgwata Purānas explicitly state :

यदा मघातो यास्यन्ति पुव्वर्षाढ़ां महर्षय: ।
तदा नन्दात्प्रभृत्येष कलिर्वृद्धि गमिष्यति ।।

(*Bhāgwata*, Sk. XII, Ch. II, 32)

तेन सप्तर्षयो युक्तास्तिष्ठन्त्यब्दशतं् नृणाम् ।
तेतु पारीक्षिते काले मघास्वासन्द्विजोत्तम् ।। 106

प्रयास्यन्ति तदा चैते पूर्वाषाढ़ां महर्षय: ।
तदा नन्दात्प्रभृत्येष गतिवृद्धि गमिष्यति ।। 112

(*Viṣhṇu*, 4, 24, 105, 112)

That Sapṭa Rishis were in the Maghā Nakshatra at the time of Parīkṣhit's birth whereas they entered in the Poorvāshādha Nakshatra in the reign of the successor of the Mahāpaḍmananda. We know that Mahāpaḍmananda, the last Nanda king was defeated by the Chandragupta Maurya in either 324 B.C. or 317 B.C. Therefore the Chandragupta Maurya becomes the real successor of the Nandas. We have already equated the 76th Sapṭarishi year in Maghā Nakshatra with the 1362 B.C. i.e. the beginning year of the Mahābhārata war, according to the 3030 years cycle theory and thus Sapṭarishis finally left the Maghā Nakshatra in (1362 B.C.+36 years=) 1326 B.C. Sapṭarishis take 112 years 2 months and 20 days in each Nakshatra[21] i.e. 1010 years for nine Nakshatras, the actual distance between the end of Maghā and the beginning of Poorvāshādha. Thus Sapṭarishis actually entered in Poorvāshādha Nakshatra, precisely in (1326 B.C.+ 1010 years=) 316 B.C. the date definitely fell within the reigning period of Chandragupta Maurya. This synchronism finally validates the analysis of Purānic chronology from the birth of Parīkṣhit up to the coronation of Chandragupta Maurya.

VII.3. BUDDHIST CHRONOLOGY

Buddhist Ceylonese chronicle assigns (426-404 B.C.=) 22 years rule for the 10 sons of Kālāshoka. Dr. R.S. Tripathi writes[22] :

'Greek Writer Curtius deposes that Alexander's Magadhana contemporary was the son of a barber who by his good look had won the queen's heart, and who subsequently assassinated the reigning sovereign perhaps Kālāshoka, represented in the Harsacharita to have been done death with a dagger thrust into his throat in the vicinity of his capital—Harsacharita, C.T. p. 193. . . . At first he pretended to be the guardian of the young princes (i.e. sons of Kālāshoka), they were ten in number, the most prominent being Nandibardhana and are believed to have ruled jointly for 22 years, according to the Ceylonese chronicle.'

Therefore Nanda dynasty ruled for (424-324 B.C.=) 100 years, exactly in the configuration of (424-402 B.C.=) 22 years as the guardian ruler over the Śiśunāga dynasty (i.e. over the Kālāshoka's sons equated with the Purānic Nanda Suta)+(402-324 B.C.=) 78 years as an independent sovereign ruler over Magadha. This arrangement in order to include 10 sons of Kālāshoka (i.e. Purānic Nanda-Suta) for 22 years as Buddhist sources intended, in no way mark the quality and reality of Purānic chronological statement concerning the Nanda dynasty rule.

The (424–324 B.C.=) 100 years Purānic period for Nanda dynasty rule over Magadha can further be confirmed by the Bhāvya's information.[23] A certain Bhāvya wrote a story of the comments on the splitting-up into schools, Nikāya-Bhedavibhaṇga-vyākhyāna, which has been inserted in the Tibetan Tañjur. The document contains three lists of Buddhist sects. The third illustrates the point of view of Sammatīyas, and starts with the famous description of the Mahāsāṃghika schism in 137 pBm[24] :

"Others say : In 137 after the Buddha's parinirvāna the kings Nanda and Mahāpadma convened the noble Saṃgha in the town of Pāṭaliputra, and after the members of meeting had acquired the

unattached, cool condition, there entered noble Mahākāśyapa, noble Mahāloma, Mahāṭyāga, Uttara, Revati and other Arhaṇts who had acquired perfect knowledge. However, bad bhikṣus who were the opposite to all goodness, dressed themselves in the garments of bhikṣus, and teached the various miracles. From the five doctrinal points a great schism arose among the bhikṣus. The Sthaviras Nāga, Sthiramati and Bahuśruta praised the five points and taught them. They said : To give in to others, ignorance, doubt, participation, and to cure one's own person, that is the 'Buddha's discipline'. Then they split into two schools, the Sthavira and the Mahāsāṃghika..."

The date of the schism, 137 pBm represents a traditional problem. Lamotte writes[25] :

> "This new tradition differs from the preceding and the next ones so far as it does not link the schism to anyone among the three important Buddhist councils—Rājagriha, Vaishālī and Pāṭaliputra—nor to some glorious reign during the history of Buddhism, such as the reign of Ajātshatru, or Kālāshoka, or Ashoka."

Neither did André Bareau solve the problem of the date though he came, according to Eggermont, quite close to its solution by identifying Nanda with Ashoka, as the names represent, in fact synonyms. A. Bareau writes[26] :

> "The strange part of it is that Nanda is not the personal name of king, as e.g. Mahāpaḍma, but actually the name of a dynasty....So the name of Nanda is in the same way as its close homonym, Nandin, a synonym of Ashoka."

According to the Ceylonese chronicle, Buddha died in 544 B.C., therefore, 137 pBm fell in (544 B.C.+137 pBm=) 407 B.C. Prof. Dr. Eggermont suggests that 137 pBm coincided with the 17th year of Ashoka's reign[27] (in that year third Buddhist council of Pāṭaliputra seems to be occurred), but I have found that 137 pBm i.e. 407 B.C. actually coincided with the 17th year of first Nanda king, the Nanda Suta's (majority of later Purānas, except the Bhaviṣya, equated wrongly

the first Nanda king with the Mahāpaḍmananda) reign (424 B.C.+17 regnal years=) 407 B.C. in exact coincidence with the Bhāvya's information.

Pāli chronicles viz. Dīpavaṃsa and Mahāvaṃsa omitted this important Buddhist council of Pāṭaliputra in the reign of king Nanda Suta, in which the great schism between Sthavira and Mahāsāṃghika actually had taken place. In reality, this great schism was seeded initially in Vaishālī council held in 100 pBm (Ceylonese chronicle) or 110 pBm (Chinese and Tibetan sources).[28] Traditions differ as to why the Vaishālī council was called. All the accounts, however, record unanimously that a schism did take place about a century after Buddha's parinirvāna because of the efforts made by some monks for the relaxation of the stringent rules observed by orthodox monks. The monks who deviated from the rules were later called Mahāsāṃghika while the orthodox monks were distinguished as Therāvādins (Sthaviravadins). The decision of the Vaishālī council was in favour of the orthodox monks. The Vajjians refused to obey the decision of the majority and were expelled from the Saṃgha. According to Dīpavaṃsa (5.25) and Samant Pāsādikā, the Vaishālī council (of 700 Bhikṣus) was held in the reign of king Kālāshoka, a descendent of Ajātshatru and Śiśunāga. Kālāshoka, though formerly in favour of the Vajjian monks was prevailed upon to give his support to the council of Theras.

According to Dīpavaṃsā 5.30-31,[29] the wicked Bhikkhus, the Vajjiputtakas who had been excommunicated by the Theras, gained another party; and many people holding the wrong doctrine, ten thousand, assembled and (also) held a council. Therefore, this dhamma council is called the 'great council' (mahāsaṃgīti). The date and place of this mahāsāṃghika council is still shrouded in the mystery of ignorance, because Buddhist sources are almost silent about its chronology. In my opinion, it would take a considerable time interval of at least 20-30 years to gather ten thousand monks to held another 'great council'. Therefore, in all probability, it was the 137 pBm's Pāṭaliputra council during the reign of Nanda dynasty recorded in Sammatīya texts.

Probably, at the time of Pāṭaliputra council, the Vinaya-pamokkhataship might have been enjoyed by the Ach. Chandavajjī after the death of Thera Sonaka in 124 pBm, who by the name's pronunciation seems to be belonged to the Vajji country and might have favoured the Vajjians. Pali Chronicles viz. Dīpavaṃsa and Mahāvaṃsa, which belongs to the orthodox Therāvādin school evidently omitted this mahāsāṃghika council of Pāṭaliputra because Ach. Chandavajji probably favoured the mahāsāṃghikas, therefore, these Pāli Chronicles, when finally edited, omitted the name of Ach. Chandavajji from their chronological scheme and merely mention his name just as a parallel Acharya (approximately of equal rank) to the Thera Siggava. The motivated omission of the name of Ach. Chandavajjī from the chronological scheme of the orthodox school of Therāvādins might be the principal cause to show a deficit of 53/58 years by the Pāli chronicles with reference to the coronation of Ashoka Maurya.

In fact, Ach. Chandavajjī enjoyed the Vinaya-pamokkhataship for 58 years between the Thera Sonaka and Thera Siggava, but in later time, it becomes 55 years. Further more, Siggava's Vinaya-pamokkhataship was in reality to be the 52 years only between the 6th year of Kālāshoka's sons reign (Dīpavaṃsa, 5.99) and 14th year of Chandagutta (Dīpavaṃsa, 5.100). This period consists of 16 remaining years of Kālāshoka's sons+22 years of Nanda dynasty+14 years of Chandgutta=52 years only. 55 years period for Thera Siggava [is the sum of 52+3=55 years where 3 years excess borrowed from the Ach. Chandavajjī's period (58-55=) 3 years loss] in fact raised the total period of Vinaya-pamokkhataship from Upāli to Moggaliputta Tissa by (55-52=) 3 years with reference to the Magadha and Ceylon kings-list. Beginning point of the Vinaya-pamokkhata list coincided with the 8th year of Magadha king Ajātshatru's reign (with the death of Buddha) and also with the zero year of Ceylonese king Vajaya (Dīpavaṃsa, 3.60; 11.8). Whereas, Moggaliputta died 26 years after the Ashoka's abhisheka and 8 years after the death of Ceylonese king Muṭasīva, 68 years after the enjoyment of Vinaya-pamokkhataship. Between these two reference

points, the arrangement of Buddhist Theras and kings of Magadha and Ceylon are as follows :

TABLE XX

Buddhist Theras		*Magadha kings-list*		*Ceylonese kings-list*	
Uplāli	30	Ajātshatru	24	Vijaya	38
Dāsaka	50	Udaya	16	Interregnum	1
Sonaka	44	Anuruḍdha &)		Paṇḍuvāsa	30
		Muṇda)	8		
Siggava	55	Nāgadāsa	24	Abhaya	20
Moggaliputta	68	Śiśunāga	18	interregnum	17
		Kālāshoka	28	Paṇḍukābhya	70
		Kālāshoka's sons	22	Muṭasīva	60
		Nandas	22	Devānāmpiya Tissa	8
		Chandragupta	24		
		Bindusāra	28		
		interregnum	4		
		Ashoka Maurya	26		
247		244		244	

This comparison shows clearly that the Vinaya-pamokkhataship list was inflated by 3 years with reference to the Magadha and Ceylonese kings-list. This was happened only due to the omission of Ach. Chandavajjī's name from the chronological scheme and his 58 years of Vinaya-pamokkhataship period. Thus 58 years of Ach. Chandavajjī+52 years of Thera Siggava=110 years of the original period got reduced to the 55 years of Thera Siggava's period only.

The 55/58 years of Ach. Chandavajjī, when omitted from the chronological scheme of Pāli chronicles of orthodox school, would certainly reflected back to the Magadha and Ceylonese kings-list also. In Magadha kings-list, 80 years (404-324 B.C.) of Nanda dynasty rule after Nanda Sutas, thus got reduced to the (80–58=) 22 years in the Pāli chronicles because Ach. Chandavajjī's Vinaya-pamokkhataship period, totally, fell within the reign of Nanda dynasty of Magadha. In Ceylonese kings-list, on the other hand, interregnum period of 70 years, between the kings Abhaya and Paṇḍukābhya, got reduced to 17 years only because in Pāli 'Sattati' (70, Hindi : Sattara) can

easily be modified in Pali 'Sattara' (17, Hindi : Sattarah).[30] It gives a reduction figure of (70–17=) 53 years. When we add this reduction figure to the Ceylonese kings-list, for compensation, it gives (244+53=) 297 years between the Zero year of king Vijaya and 8 years of Devānāmpiya Tissa. Magadha kings-list, on the addition of missing 56 years period in the reign of Nandas plus 2 years up to the end of Kālāshoka's reign gives (244+58=) 302 years whereas Vinaya-pamokkhataship list also gives, on the addition of (58–3=) 55 years, (247+55=) 302 pBm epoch.

The rudiments for this compensation may also be shown in the Pāli chronicles.[31] Dīpavaṃsa 5.95 gives 74 years for Upāli after Upasampadā whereas Dīpavaṃsa 5.96 says : 'learned Upāli was the whole time Chief of the Vinaya which intended the 74 years Vinaya-pamokkhataship period for Upāli, whereas Dīpavaṃsa 5.94 states : Tissa Moggaliputta made his pupil Mahinda Chief of the Vinaya and attained Nibbāna eighty-six years (after Upasampadā) which in turn gives (86–12=) 74 years period of the Vinaya-pamokkhataship of Moggaliputta Tissa. If we insert these two statements in Dīpavaṃsa 5.96, then we got :

TABLE XXI

Upāli	:	74 years
Dāsaka	:	50 years
Sonaka	:	44 years
Siggava	:	55 years
Moggaliputta	:	74 years
	TOTAL	297 years

This 297 years total is coincided exactly with 297 years of Ceylonese kings-list after adding 53 years missing in interregnum period.

If 297 years of Vinaya-pamokkhataship is coincided with the 26 years of the Ashoka's reign (Dīpavaṃsa 5.102). Then it gives

(297–26=) 271 pBm for the Ashoka's coronation which in turn gives [271 pBm–(28 years of Bindusāra+24 years of Chandragupta=)] 219 pBm or 215 pBm (if we also add 4 years of interregnum between the end of Biṇdusāra and the coronation of Ashoka Maurya) for the coronation of Chandragupta Maurya which is in all confirmity with the Jain Pattāvalis. On taking the original ancient Vinaya-pamokkhataship list :

TABLE XXII

Upāli	:	30 years
Dāsaka	:	50 years
Sonaka	:	44 years
Chandavajjī	:	58 years
Siggava	:	52 years
Moggaliputta	:	68 years
		302 years

we get 302 years up to the 26 years of Ashoka Maurya. It gives 276 pBm for Ashoka's coronation whereas 220 pBm or 224 pBm for the Chandragupta's coronation.

After the successful placement of Chandavajji's 58 years in the Vinaya-pamokkhataship list and its compensation to the Magadha and Ceylonese kings-list, it is now better to analyse the faulty Pāli chronicle viz. Dīpavaṃsa for year to year synchronism after the Buddha's parinirvāna up to the death of Moggaliputta Tissa i.e. 26 years of Ashoka's abhisheka in detail as follows :

We know from Buddhist source Dīpavaṃsa 3.57/58 that Buddha attained enlightenment at his age of 35 years and Upāli obtained the Upasampadā Ordination 1 year after the enlightenment i.e. 36 years of Buddha's age. Buddha preached his eternal truth for 37 years during the Bimbasāra's reign (Dīpavaṃsa 3.59) and 8 years during Ajatshātru's reign (Dīpavaṃsa 3.60). Thus according to Dīpavaṃsa

3.57-60, Buddha lived a total of (35+37+8=) 80 years of his age and preached the eternal truth for (37+8=) 45 years and died (80–36=) 44 years after the Upasampadā of Upāli in 544/543 B.C.

According to Dīpavaṃsa 4.34, after the Sambuddha had attained Parinibbān, the great teacher Thera Upāli taught then the Vinaya full 30 years. Dīpavaṃsa 4.38 states that Prince Udaya reigned sixteen years; when Udayabhaḍḍa had completed 6 (years), Thera Upāli attained Nibbāna. This 30 pBm period for Upāli after Buddha's death consists of (544 B.C.–520 B.C.=) 24 years of Ajātshatru (D.V. 3.61)+(520 B.C.–514B.C.=) 6 years of Udaya (D.V. 4.38). On adding 30 pBm period for Upāli's Vinaya-pamokkhataship period, to his 44 years period of Upasampadā before the Buddha's death, the total period of Upāli from his Upasampadā to his death becomes (44+30=) 74 years (D.V. 5.95). Thus with all coincidence, Thera Upāli died in 30 pBm i.e. 514 B.C.

According to Dīpavaṃsa 4.27/28, sixteen years had elapsed after the protector of the world had entered Nibbāna, it was the twenty-fourth year of Ajātshattu's (reign), and the sixteen of the Vijaya's—28; learned Upāli had just completed sixty years, (then) Dāsaka received the Upasampadā ordination from Thera Upāli in 16 pBm. After 14 years, in (16+14=) 30 pBm, of the Upasampadā ordination of the Dāsaka, the great teacher (Upāli) entered Nibbāna, after having appointed his pupil, the clever Thera Dāsaka, (to be chief) of the Vinaya (D.V. 4.37). According to Dīpavaṃsa 4.43, Dāsaka, in his turn, having made his pupil Thera Sonaka chief of the Vinaya attained Nibbāna in his sixty-fourth year (after Upasampadā—D.V. 5.95). Thus Thera Dāsaka served as the chief of Vinaya for (64–14=) 50 years (D.V. 5.96) i.e. from 30 pBm to 80 pBm (514-464 B.C.). According to Dīpavaṃsa 5.98, after 8 years of Śiśunāga's reign, Dāsaka attained parinibbāna. According to Ceylonese chronicle (sec. VI.1.3 of this work), Nāgadāsaka ended in 472 B.C., therefore, Śiśunāga's 8 regnal year should must coincide with (472 B.C.+8 years=) 464 B.C. Thus Dāsaka's period consists of 10 remaining years of king Udaya+8 years of Anuruḍḍhaka & Munda+

24 years of Nāgadāsa +8 years of Śiśunāga=50 years. Concerning the Ceylonese kings-list, when eight years of Ajātshattu had elapsed, Vijaya came hither (D.V. 11.8) for 38 years (D.V. 9.42); after the fourteen years of Magadha king Udaya, Vijaya expired (D.V. 11.8). Thus Vijaya's 38 years exactly in coincidence with the Ajātshattu's 24 years remaining period+14 years of Udaya. Fifteenth regnal year of Udaya coincided with the one year interregnum between the king Vijaya and king Paṇḍuvāsa. Thus king Paṇḍuvāsa crowned in Ceylon in 39 pBm i.e. the beginning of 16th regnal year of Udaya (D.V. 11.8) for 30 years (D.V. 10.5) up to the (39 pBm+30 years=) 69 pBm (i.e. last one year of Udaya+8 years of Anuruḍdha & Muṇda+ 21 years of Nāgadāsa). According to Dīpavaṃsa 11.10, in the twenty-first year of Nāgadāsa, Paṇḍuvāsa died and they crowned Abhaya in the twenty-first year of Nāgadāsa.

The error-figure of 3-years (due to the omission of Ach. Chandavajjī's name from the Chronological scheme of Pāli chronicles and the Thera Siggava's original 52 years period increased to 55 years) echoed back up to the Upasampadā ordination event of Thera Sonaka. According to Dīpavaṃsa 4.41, (when) cleaver Dāsaka had completed 45 years and Nāgadāsa had reigned ten years, and king Paṇḍu(vāsa) twenty, then Sonaka received the Upasampadā ordination from Thera Dāsaka. Dāsaka's 45 years (after Upasampadā) epoch coincides with (45 years+16 pBm=) 61 pBm or (464 B.C.–19 years=) 483 B.C. According to the Ceylonese chronicle, Nāgadāsa ruled for (496–472 B.C.=) 24 years i.e. up to the (544 B.C.+72 pBm=) 472 B.C., therefore, Nägädasa's tenth regnal year should coincide with (496 B.C.+10 years=) 486 B.C. Here we have got a difference of (486 B.C.–483 B.C.=) 3 years between the two statements viz. the 45 years of Dāsaka's Upasampadā period of the tenth regnal year of Nāgadāsa. Thus Dīpavaṃsa 4.41/43 intended that the gap between the Thera Sonaka's Upasampadā ordination event and the beginning of his Vinaya-pamokkhataship had the difference of (64–45=) 19 years only. Whereas, according to the Dīpavaṃsa 5.95, Thera Sonaka died 66 years after Upasampadā but serves as the Chief of the Vinaya for

44 years (D.V. 5.96) i.e. the difference becomes (66-44=) 22 years. Here, this 22 years period seems to be in every coincidence with reference to the 10 regnal years of Nāgadāsa, at the Upasampadā of Sonaka, and the 8th regnal years of Śiśunāga at the death of Dāsaka because 14 remaining year of Nāgadāsa+8 regnal years of Śiśunāga =22 years, which in turn gives 42 (=64-22) years after Dāsaka's Upasampadā i.e. (16 pBm+42 years=) 58 pBm for Sonaka's Upasampadā event and (58 pBm+22 years=) 80 pBm for Dāsaka's death.

The Thera called Sonaka had just completed forty years, Kālāshoka had then reigned ten years and half a month in addition (D.V. 4.44),—45. Pakuṇḍaka was a robber during seventeen years : (of this period) eleven years and six months more had passed,—46. When Thera Sonaka, the chief of the school, admitted Siggava and Chandavajjī in the Upasampadā ordination. This epoch coincided with the (58 pBm+40 years=) 98 pBm in Vinaya-pamokkhata list whereas (24+16+8+24+18+10=) 100 pBm in Magadha list and (38+1+30 +20+11.5=) 100.5 pBm in Ceylonese list. According to Dīpavaṃsa 4.47, at the time, when Bhagwata had been dead a hundred years, the Vajjiputta's of Vaishālī proclaimed the ten indulgences. Actually, 98 pBm was the epoch for the admission of Chandavajjī only in the Upasampadā ordination instead of Siggava and Chandavajjī both.

Thera Sonaka serves as the chief of the Vinaya for 44 years i.e. up to (80 pBM + 44 years=) 124 pBm or (464 B.C. + 44 years=) 420 B.C. According to Dīpavaṃsa 5.99, after Śuśunāga's (Kālāshoka's) death, the ten brothers succeeded; they reigned all jointly 22 years. In the sixth year of their reign, Sonaka attained Parinibbān. Thus Thera Sonaka serves 44 years (=10 years, the remaining period of Śiśunāga+28 years of Kālāshoka+6 years of Kālāshoka's sons). According to Ceylonese chronicle (sec. VI.1.3.) Kālāshoka ended in (544 B.C.+118 pBm=) 426 B.C. and thus 6th regnal year of his sons should must coincide with (426 B.C.+6 years=) 420 B.C. But according to our conclusive opinion (Sec. VI.1.7) Kālāshoka actually ended in 424 B.C. instead of 426 B.C. Therefore, Ceylonese chronicle got a lag of 2 years with reference to the Purānic chronology for the

end of Kālāshoka. But this lag of 2 years was immediately compensated by the Pāli chronicles by giving (426 B.C.-404 B.C.=) 22 years for the 10 sons of Kālāshoka in synchronism with the Bhaviṣya Purāna's Nanda Sutas (424-404 B.C.=) 20 years. Thus the 6th regnal year of Kālāshoka's sons may also be characterised by the 4th regnal year of Nanda Sutas in the Purānic language because 10 sons of Kālāshoka actually named as Nanda Sutas and ruled under the guardianship of their eldest brother Bhadrasena or Ugrasena. If we take 58 pBm tradition for the Upasampadā ordination for Thera Sonaka, then Sonaka might actually died in (58 pBm + 66 years after Upasampadā=) 124 pBM i.e. 420 B.C.

Acharya Chandavajjī admitted in the Upasampadā ordination in 98 pBm and after (66-40=) 26 years in (98 pBm+26 years=) 124 pBM i.e. 420 B.C. he became chief of the Vinaya for 58 years up to the (124 pBm+58 years=) 182 pBm i.e. (544 B.C.+182 pBm=) 362 B.C.

Concerning the Ceylonese kings-list, we have seen that king Abhaya began with 69 pBm, which was the 21st year of Nāgadāsa, for 20 years i.e. up to the (69 pBm+20 years=) 89 pBm (=last 3 years of Nāgadāsa + 17 years of Śiśunāga). After Abhaya, according to H. Oldenberg's translation of Dīpavaṃsa (11.½), there was an interregnum of 17 years before the coronation of Pakuṇḍaka. Accordingly, Oldenberg interprets the verse 11.11 :

(.....*Seventeen years*[1]*; twenty four*.....)

'the first words of this fragment seem to refer to the interreign after Abhaya's death which lasted seventeen years. The number twenty-four I can not explain.'

In my opinion, the first words of this fragment (. . . Seventeen years) might belong to the end epoch of Abhaya's twenty years denoting its synchronism with the 17th regnal year of Śiśunāga. With the 18th regnal year of Śiśunāga, an interregnum of 70 years rather than of 17 years, as Oldenberg's Dīpavaṃsa intended, began. It consists of 1 year of Śiśunāga + 28 years of Kālāshoka + 22 years of Kālāshoka's sons+19 years of Nandas. The second word of the fragment (DV.

11.11—'twenty four. . . .') seems to represent the twenty-fourth regnal year of Nanda dynasty. Because, the interregnum began after 17 regnal years of Śiśunāga, then naturally '24' figure of years with which the interregnum definitely ended and the reign of Pakuṇḍaka began, can only be belonged to the Kālāshoka, who reigned for 28 years (i.e. more than 24 years according to the Ceylonese Chronicle) or Nanda dynasty who reigned for a total of 80 years after Nanda Sutas according to the Purānas. Kālāshoka's 24th year possibility can easily be ruled out because if we equate out with it then the period of interregnum becomes 25 years (i.e. last year of Śiśunāga + 24 years of Kālāshoka) instead of 17 or 70. On the other hand, other evidences including Mahāvaṃsa give only 20 years period for Kālāshoka. If we equate the end of the interregnum with the 24th year of Nanda dynasty then the period of interregnum becomes (1+28+22+24=) 75 years instead of 70. The difference of (75–70=) 5 years, may be due to the error crept in Buddhist chronicles concerning the coronation of Śiśunāga over Magadha. According to our analysis (sec. VI.1.7) Śiśunāga took the Magadha throne in 467 B.C. for the 23 (=467 B.C.-444 B.C.) years, whereas Buddhist Ceylonese chronicles give (472-454 B.C.=) 18 years for Śiśunāga. On taking 467 B.C. as the coronation date of Śiśunāga on Magadha throne, Śiśunāga's 17th regnal year (i.e. Abhaya's last year of reign) should be coincided with (467 B.C. + 17 years=) 450 B.C. If an interregnum of 70 years began with 450 B.C. then it should be ended with (450 B.C. + 70 years=) 380 B.C. whereas Ceylonese chronicle assigns the beginning of Śiśunāga with (544 B.C.-72 pBm=) 472 B.C., thus, 17th year of Śiśunāga's reign coincided with (472 B.C.+17 years=) 455 B.C. which gives 75 years of interregnum coincided with 380 B.C.

According to Ceylonese chronicle, 24th regnal year of Nandas of Magadha list can be equated with (24 : Ajātshatru+16 : Udaya+8 : Anuruḍdha and Muṇda+24: Nāgadāsa+18 : Śiśunāga+28: Kālāshoka +22 : Kālāshoka's 10 sons+24 : Nanda dynasty=) 164 pBm, or, according to Ceylonese kings-list, with (38 : Vijaya+1 : interregnum+ 30 : Paṇḍuvāsa+20 : Abhaya+75 : interregnum=) 164 pBm. If we

take 544 B.C. for Buddha's death then 164 pBm would be equated with the (544 B.C.+164 pBm=) 380 B.C. for the end epoch of interregnum and the beginning epoch for the Ceylonese king Pakuṇḍaka. According to our analysis in sec. VII.2, based on the Bhaviṣya Purāna studies, Nanda dynasty took the throne of Magadha in (424 B.C., the end of Kālāshoka+20 years of Nanda Sutas=) 404 B.C. Thus the 380 B.C. epoch represented the (404 B.C.–380 B.C.=) 24th regnal year of Nanda dynasty king. Whereas Ceylonese chronicle also gives (544 B.C.+140 pBm=) 404 B.C. for the end of Kālāshoka's sons rule and the beginning of Nandas. On taking 404 B.C. we can exactly synchronise the 24th regnal year of Nandas with (404 B.C.+24 years=) 380 B.C. according to both the Purānic as well as the Buddhist sources with reference to the Magadha king-list. Whereas Buddhist Ceylonese kings-list shows the error of 5 years, due to which, the missing period of 58 years (of Ach. Chandavajji's Vinaya-pamokkhataship) got reduced to (58–5=) 53 (=70–17) years error finally crept in the Ceylonese king-list of Pāli chronicles.

After the interregnum, king Pakuṇḍaka ruled over Ceylonese throne for (164 pBm-234 pBm or 380 B.C.-310 B.C.=) 70 years. According to Dīpavaṃsa 11.12 in the fourteenth year of Chandagutta the king called Pakuṇḍaka died, in the fourteen year of Chandagutta, they crowned Muṭasīva. If we take the coronation of Chandagutta just after the 80 years reign of 8 other Nandas after Nanda Suta in (404 B.C.+80 years=) 324 B.C. then Chandagutta's 14th regnal year was in exact coincidence with the (324 B.C.+14 years=) 310 B.C. Concerning the Vinaya-pamokkhataship list, the omitted Ach. Chandavajjī actually died in 182 pBm or 362 B.C. and Thera Siggava became the Chief of the Vinaya for 52 years i.e. upto (182 pBm+52 years=) 234 pBm or (362 B.C.+52 years=) 310 B.C. i.e the fourteenth regnal year of Chandagutta. Dīpavaṃsa, 5.100 confirms it by saying : 'Chandagutta reigned for twenty-four years; after fourteen years of his reign, Siggava attained parinibbān. Thus the end of king Pakuṇḍaka's 70 years reign in Ceylonese kings-list and the death of Thera Siggava both had coincided with the 14 rengal year of Chandagutta i.e. in 234 pBm or 310 B.C.

According to Dīpavaṃsa 5.81, 12 years before the Thera Siggava's Nibbān in (310 B.C.–12 years=) 322 B.C. i.e. (324 B.C.–322 B.C.=) 2 years of Chandagutta's (reign) had elapsed Siggava had completed sixty-four (after Upasampadā) and king Pakuṇḍaka fifty-eight years, (when) Moggaliputta received Upasampadā ordination from Thera Siggava. Dīpavaṃsa 5.93 says: 'Wise Siggava made young Moggaliputta chief of the Vinaya attained Nibbāna 76 years (after Upasampadā) during the 14 regnal years of Chandagutta and the beginning years of Ceylonese king Muṭasīva. Dīpavaṃsa 11.5 says: 'The son of Pakuṇḍaka was the prince called Muṭasīva, this king reigned sixty years over Tambapaṇṇi'. According to Buddhist Magadha kings-list, Muṭasīva's 60 years consists of 10.5 remaining years of Chandagutta+28 years of Bindusāra+4 years of interregnum +17.5 years of Ashoka. According to Dīpavaṃsa 11.13/14, seventeen years had elapsed after the coronation of Ashoka, then Muṭasīva died. When seventeen years of that king (that is, Ashoka) and six months of the next year had elapsed, in the sec nd month of winter season, under the most auspicious Nakkhatta of Aśaḷhā, Devānāmpiya was installed in the kingdom of Tambapaṇṇi. This event should coincide with (310 B.C.+60 years=) 250 B.C. Because, this event coincided with the 18th regnal year of Ashoka, thus, Ashoka actually coronated in (250 B.C.–18 years=) 268 B.C.

Six years of Ashokadhamma's (reign i.e. in 268 B.C.+6=262 B.C.), sixty years of Moggaliputta (322 B.C.+60 years=262 B.C.; in D.V. 5.82—Sixty six is given), forty-eight years of Muṭasīva (310 B.C. + 48 years=262 B.C.) had elapsed (when) Mahinda received the Upasampadā ordination from Moggaliputta. Dīpavaṃsa 5.102 says, 'When twenty-six years of Ashoka's reign had elapsed, the (Thera) called Moggaliputta, after having exalted the splendour of the Religion, attained the end of his life and reached nibbāna. The 26th year of Ashoka's reign coincided with (268 B.C.+26 years=) 242 B.C. Since, Moggaliputta admitted in the Upasampadā ordination in 322 B.C. i.e. 2nd regnal year of Chandagutta, therefore, Moggaliputta died (322 B.C.–242 B.C.=) 80 years after Upasampadā. Dīpavaṃsa 5.107

confirms it by saying : 'Tissa Moggaliputta attained Nibbāna eighty years (after Upasampadā) after having made his pupil Mahinda chief of the Vinaya'.

The detailed analysis of Pāli Chronicle 'Dīpavaṃsa' in preceding pages of this work for year to year synchronism, clearly shows that Moggaliputta died in (544 B.C.+302 pBm=) 242 B.C. Thus Ashoka coronated in (242 B.C.–26 years=) 268 B.C. or (302 pBm–26 years=) 276 pBm. 218 pBm theory of Pāli chronicles for the coronation of Ashoka Maurya was purely due to the omission of the name of Ach. Chandavajjī and his Vinaya-pamokkhataship period of (276 pBm–218 pBm=) 58 years. To compensate it, Pāli chronicles motivatedly reduced Nanda dynasty rule over Magadha from 80 years to (80–58=) 22 years and 70 years period of interregnum between the Ceylonese king Abhaya and Pakuṇḍaka into the 17 years period. After placing 58 years period for Ach. Chandavajjī at their true historical place, Pāli chronicles, too, allow (22+58=) 80 years for 8 Nanda kings which on the inclusion of 20 years of Nanda Suta, the first Nanda king of Bhaviṣya Purāna gives (20+80=) 100 years as majority of Purānas give for nine Nandas.

VII.4. JAIN CHRONOLOGY

Now we analyse the Jain chronological statements. All Jain records are uniform in extending the duration of Nandas to 155 years rather than the unanimous Purānic figure of 100 years. This inflation of (155–100=) 55 years in Jain chronology for Nandas was certainly due to the fact that Purānas collectively named Śiśunāga and Kākavarṇa as Mahānandi, thus, Mahānandi and Nav-Nandas became under the same dynastic title and due to it, Jain sources never mention Śiśunāga dynasty before Nav-Nandas separately and they simply called 'Nandas' for the aggregate of Śaśunāga (i.e. Mahānandi) plus Nav-Nandas.

Jain sources preferred to mention the chronology of Ujjain, instead of Magadha, after the death of Mahāvira. According to Jain source Avachoori of Prākṛit Pattāvali named as Duṣṣamā-kāla-Shṛamnasaṃgha-stva of Dharmaghosasūri of 1300 AV, Jain tīrthaṇkar

Mahāvira and Chanda Pṛadyōte, the king of Ujjain, both died in the same night of the Kārtika Amāvaṣyā (i.e. Dīpāvali festival) of 545 B.C. and simultaneously king Pālaka began to rule for 60 years. It gives (60+155=) 215 years interval between the death of Mahāvira and the coronation of Chandragupta Maurya. Because the above mentioned Shṛamnasaṃgha-ṣtva deals with the beginning of Duṣṣamā-kāla of Jain chronology which was, according to some Jain sources, viz. Kalpasūtra of Bhadravāhu and Triloka Prajñapti (T.P. 4, 1474), began 3 years, 8 months and 1 Paksha after the death of Mahāvīra i.e. with Ashādha Sukla Pūrnimā of 541 B.C. A number of Jain sources, viz. Kharatargachcha Pattāvali, those included the difference of 4 years between the death of Mahāvira and the beginning of Duṣṣamākāla, give (215+4=) 219 years interval between the death of Mahāvira (*c.* 545 B.C.) and the coronation of Chandragupta Maurya (*c.* 326 B.C.).

The 326 B.C. date for the coronation of Chandragupta Maurya shows a clear difference of (326 B.C.–324 B.C.=) 2 years with reference to the Purānic data but in every coincidence with the Buddhist Magadha chronology. If we take *c.* 426 B.C., the precise Ceylonese chronicle (sec. VI.1.3) date for the end of Kālāshoka (rather than the Purānic end date *c.* 424 B.C.) and add Purānic 100 years for Nav-Nandas which give precisely (426 B.C.+100 years=) 326 B.C. for the coronation of Chandragupta Maurya. Prabably Jain sources were nearer to the Buddhist Ceylonese chronicle in assigning 155 years to Nandas. Buddhist Ceylonese chronicle, after making the rearrangement for the original historical place to Nāgadāsa (=Darshaka of Purānas), gives 479 B.C. for the capture of Ujjain by Śiśunāga from the hands of last Pālaka king, the Nandivardhana. This 479 B.C. beginning of Śiśunāga gives precisely 155 years period to 'Nandas' of Jain chronology (=Śaśunāgas+Nav-Nandas of Hindu Purānas) and gives the coronation of Chandragupta Maurya in (479 B.C.+155 years=) 324 B.C. in full accordance with the analysis of Hindu Purānas (sec. VII.2) and Buddhist sources (sec. VII.3).

Buddhist sources remove their 2 years lag-factor, in comparison

with the Purānic sources, by increasing the period of Kālāshoka's sons to (426 B.C.-404 B.C.=) 22 years which were the equivalent to Nanda Suta of Bhaviṣya Purāna ruled for (424 B.C.-404 B.C.=) 20 years only. The 2 years lag factor, crept in Jain chronology, can also easily be removed by raising the 60 years Pālaka's rule over Ujjaini (of Jain chronology), by merely 1 year, to 61 years (=545 B.C.-484 B.C.), Pṛadyōte dynasty rule after the death of Mahāvira as intended in purānic kings-list [A] of Avaṇti (sec. VI.1.1). The remaining 1 year lag-factor of Jain chronology can be adjusted with the Nanda's rule. 155 years Nanda's rule can be separated in two historical fractions—(i) (497 B.C.-424 B.C.=) 55 years of Śiśunāga plus Kākavarṇa which were collectively known as Mahā Nandi and (ii) (424 B.C.-324 B.C.=) 100 years of Purānic Nav-Nandas. The 4 years difference between the death of Mahāvira and the beginning of Duṣṣamākāla can only be adjusted with the (479 B.C.-424 B.C.=) 55 years period of Śaśunāga which now becomes (483 B.C.=) 59 (=55+4) years. Here we add the remaining 1 year lag factor of Jain chronology and now Śaśunāgas become able to rule (59+1=) 60 years (484 B.C.-424 B.C.) over Ujjain instead of 55 years as Jain chronology seems to be intended. Purānic kings-list [A] of Avaṇti actually gives (484 B C.–444 B.C.=) 40 years of Śiśunāga+(444 B.C.-424 B.C.=) 20 years of Kākavarṇa i.e. a total of (40+20=) 60 years of Śaśunāgas over Ujjain.

Thus according to my concluding opinion Pālaka dynasty ruled (545 B.C.-484 B.C.=) 61 years+Śaśunāgas (i.e. Mahānandi) ruled (484 B.C.-424 B.C.=) 60 years+Nav-Nandas ruled (424 B.C.-324 B.C.=) 100 years. All the three gives (61+60+100=) 221 years period between the death of Mahāvira (*c.* 545 B.C.) and the anointment of Chandragupta Maurya (*c.* 324 B.C.). Therefore (20+80=) 100 or (22+80=) 102 years period for Nav-Nandas during 424 B.C.-324 B.C. or 426 B.C.-324 B.C. is fully confirmed by all the three sources viz. Purānic, Buddhist and Jainas. Best compromised dates for the nine individual Nanda Kings might be given as follows :

TABLE XXIII

S. No.	*Buddhist Name*	*Purānic Name*	*Christian calendar date*
1	Ugrasena	Nanda Suta	424-404 B.C.
2	Paṇḍuka	Pṛa-Nanda	404-394 B.C.
3	Paṇḍugati	Parā-Nanda	394-384 B.C.
4	Bhūtapāla	Samā-Nanda	384-372 B.C.
5	Rāstrapāla	Priyā-Nanda	372-360 B.C.
6	Govishanāka	Devā-Nanda	360-348 B.C.
7	Dasaisddhaka	Yajña Bhanga	348-342 B.C.
8	Kaivarta	Mauryā-Nanda	342-336 B.C.
9	Dhana	Mahā-Nanda	336·324 B.C.

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6. Kharvela's Hathigumpha Inscription.

7. P.H.A. I., p. 234 fn.

8. Myssore and Coorge from the inscriptions, Rice, p. 3; Dynasties of Kanaries Districts, Dr. Fleet, p. 384, fn. 2; Shastri, K.A.N., Age of Nandas and Mauryas, p. 18.

9. Mahajan, V.D., Ancient India, p. 217.

10. Bhaviṣya Purāna, Pratisarga Parva, 6/31-35.

11. Mahajan, V.D., Ancient India, p. 218.

12. Venkatachelam, Chron. of Ant. Hindu Hist., pt. I, pp. 44-47.

13. Varma, K.C., Age of Bhārata War (G. ed. G.C. Agrawal), pp. 112-13.
14. Bhaviṣya Purāna, Pratisarga Parva, 6/26-35.
15. Mahajan, V.D., Ancient India, p. 217.
16. Tripathi, R.S., History of Ancient India, p. 110.
17. Mahajan, V.D., Ancient India, p. 217.
18. Bhattashali, N.K., Maurya Chronology and Connected Problems, J.R.A.S., 1932, Part II.
19. Jain, H.L., Bhārtīya Saṃskṛiti me Jain Dharma kā Yogadāna, pp. 2-9; P.L. Gupta, Gupta Sāmrājya, pp. 118-119; Jour. Bom. Br. of Roy. Asiat. Soc., 9 (P.C.), p. 147; Ind. Ant., 2, p. 247.
20. Bhattashali, N.K., Maurya Chronology and Connected Problems, JRAS, 1932, Part II, p. 283 : "The murder of Poros by Eudamos and his retirement from India in 317 B.C. are significant indications. The breaking-out of the Indian revolt headed by Chandragupta does not appear to be possible before this date; O. Stein, The coronation of Chandragupta Maurya, Archiv Orientalni Vol. I, no. 3, 1939, p. 368 : "It is impossible to reckon with an acknowledged dominion of Chandragupta before 317 B.C."; Eggermont, Chronology, p. 131 : "The Purānas grant Chandagutta and Bindusara respectively 24 and 25 years of reign, making together 49 years of reign in total. Conclusion : 317 B.C.+49 years=268 B.C. which is the year arrived at if one takes the dotted records year of the Buddha's Mahāparinirvāṇa viz. 486 B.C. as the basis of the early Ceylonese date of Ashoka's anointment in 218 pBm."
21. Prasad, Chro. of Magadha History (Annexture I), p. 15 (19).
22. Tripathi, R.S., History of Ancient India, p. 110.
23. Bhāvya, Tarkajvāla, in Mdo, XIX, pp. 162 b6-163 a3 cf. Mdo xc, no. 12.
24. Eggermont rendered into English, the German version of the text, published by Max Walleser, Die Sekten des alten Buddhimus, Heidelberg, 1927, pp. 81-82.
25. Lamotte, Etienne, Histoire du Bouddhisme Indien: des origines a Ere Saka, Louvain, 1958 (Bibliotheque du Museon, Vol. 43) p. 315; for full references also see : pp. 308-309; 315; 574; 576; 590-593; 658.
26. Barau, A., Les premiers conciles bouddhiques. Paris, 1955 (Annals du Musee Guimet, Bibliothique d' Etudes, tome 60), p. 91.

27. Eggermont, P.H.L., The Emperor Ashoka and the TiṢyarakshitāLe gend, p. 178.

28. Dīpavaṃsa, 4/47; There are slight divergences in the Chinese and Tibetan versions. The northern version generally puts the date of the council 110 years after the nirvāṇa of the Buddha—2500 Years of Buddhism, p. 44.

29. Bapat, P.V., (Gen. ed.), 2500 Years of Buddhism, p. 44; Beal, S., Records of the Western Countries, Vol. II, p. 164, says : "and because in the assembly both the common folk and the holy personage were mixed together, it was called the assembly of great congregation."

30. Oldenberg, H., Dīpavaṃsa, XI, 2-4, pp. 58; 164.

31. Oldenberg, H., Dīpavaṃsa, Ch. V, A.E.S. Print, Delhi, 1982.

8

Chronology of Mauryas

VIII.1. GREEK SYNCHRONISM

The chronology of ancient India before the coronation of Chandragupta Maurya, according to our learned European friends, was totally based on the unreliable fables, legends and traditional religious literature. Thus they kept the period before the Chandragupta Maurya under the 'Proto-History'. With the coronation of Chandragupta Maurya, they find a some sort of Greek-History contemporaneousness because they assume that the invasion of Alexander the great, occurred just a few years before the coronation of Chandragupta Maurya and they also courageously claimed on the basis of Greek sources that this Chandragupta Maurya really met, with the Alexander of Macedonia (Greece), in Punjab to seek the military aid in order to uproot, totally, the deadly powerful sudra king of Nanda dynasty.

Our traditional Hindu scholars reacted sharply on this synchronism of Alexander the great with that of the Chandragupta Maurya. They say that if any such contemporaneousness is possible, in the total absence of references in our traditional literature, concerning the greatly publicised invasion of Alexander the (so-called) great, then this Greek king may only be synchronised with that of the Chandra-

gupta of Imperial Gupta dynasty rather than the Chandragupta of Maurya dynasty. In this way, our traditional Hindu friends found 650 years (European view-point) or 1210 years (traditional view-point) extra period which provides a greater ease to the traditional Hindu scholars to solve the mystery of ancient Indian chronology after Mahābhārata war between the vast period of 3102-327 B.C.

In academic circles, European view-point is only considered and traditional Hindu view-point is totally ignored. Here, we consider both the arguments and counter-arguments concerning the above mentioned contemporaneousness with the possible degree of honesty.

VIII.1.1. GREEK REFERENCES ON CHANDRAGUPTA MAURYA

VIII.1.1.1. *Meeting of Chandragupta with Alexander*

Chandragupta's first emergence from the obscurity into the full view of history occurs in 326-25 B.C. when he met Alexander the great. The fact is recorded by two of the classical writers viz. Justin, who draw upon the history of Trogans, and Plutarch. The young Maurya might have acquainted the Macedonian invader with conditions in Eastern India. "Alexander", he is reported to have said in later times, "narrowly missed" making himself master of the country, since its king was hated and despised by his subjects for the weakness of his disposition and the meanness of his origin.[1] Details of the original speech and the manner in which it was delivered are not recorded. But we are told by Justin that his tone gave offence to the Macedonian king who gave orders to kill the Indian lad. The later sought safety by a speedy flight.[2] Curiously enough, some modern editors amend the text of Justin and propose to read 'nandrum' in place of 'Alexandrum'. The name Nanda, however, is not known from any other classical source, and Plutarch, who also refers to the meeting between Alexander and "Androkottos", makes separate mention of the king or kings of Prasii. Classical writers record other instances of Alexander's impatient with boldness of language. The cases of Cleitus and Callisthenes may be recalled in this connection.[3] The narrative of Justin leaves the impression that after his departure from Alexander's camp, Chandragupta retired to a forest tract, drew

together a body of armed men and solicited the Indians to overthrew the existing government, and support a new sovereignty.[4] The "new sovereignty" of Justin reminds us of the words 'Maurya nave rājāni' of the Mudrā-rākṣhasa just after the 326 B.C.[5]

VIII.1.1.2. *Coronation date of Chandragupta Maurya*

Megasthenes, who came to India in *c.* 302 B.C. says (quoted by Arrian, Pliny etc.).[6]

FRAGM L.C.

Plin. Hist. Nat. VI. XXI. 4-5

Of the Ancient History of the Indians

For the Indians stand almost alone among the nations, in never, having migrated from their own country. From the days of father Bachhus to Alexander the great their kings are reckoned at 154, whose reign extend over 6451 years and three months.

Solin 52.5

Father Bachhus was the first who invaded India, and was the first of all who triumphed over vanquished Indians. From his to Alexander, the great, 6451 years are reckoned with three months additional. The calculation being made by counting the kings who reigned in the intermediate period to the number of 153.

(vide Mc' Crindle's *Ancient India*, p. 115)

We know that Megasthenes was the Greek ambassador resided in the court of Chandragupta Maurya and was sent by the Syrian (Greek) king Seleucus in *c.* 302 B.C. According to my analysis,[7] Greeks pronunciated Manu Vaivaṣvata as Father Bachhus. And Megasthenes (and Pliny etc.) stated that from Father Bachhus upto the coronation of 154th Indian king viz. Chandragupta Maurya (whose coronation event is just contemporary to the invasion event of Alexander), there elapsed only 6451 years and three months. On the basis of Greek-Babylonian tradition (based on the era of Constantinople), Father Bachhus can be dated to 6775 B.C. Thus the corona-

tion of Chandragupta Maurya, the 154th Indian king, may be placed in (6775 B.C.+6451 years=) 324 B.C.

VIII.1.1.3 *War between Chandragupta and Seleucus*

The Seleucus (Nikator) carried on many wars in the East after the division of the Macedonian kingdom between himself and the other successors of Alexander, first seizing Babylon and then reducing Baktriane, his power being increased by the first success. Therefore, he passed into India, which had since Alexander's death killed governors...Sandrokottos has made it free...Seleucus came to an agreement with him and after settling affairs in the East, engage in the war against Antigonos (302 B.C.).[8] He (Seleucus) crossed Indus and waged war on Sandrokottos, king of the Indians, who dwelt about it until he made friends and entered into relations of marriage with him.[9] Seleucus Nikator gave them (the nations of Ariane) to Sandrokottos in concluding a marriage alliance, and received in exchange 500 elephants.[10] On the issue of marriage of Seleucus' daughter with Chandragupta Maurya, J. Allen expressed his views as follows—"If the usual-oriental practice was followed and if we regard Chandragupta as the victor, then it would mean that a daughter or other female relative of Seleucus was given to the Indian ruler or to one of his sons, so that Ashoka may have had Greek blood in his veins.[11]

The objection, that Seleucus' only daughter Phila II was not yet born, is idle : he could have had daughters by Apma or an earlier wife, without our fragmentary sources mentioning them.[12] According to Manjushree Mūlakalpa, at the time of death of Chandragupta, his son Bindusāra was not fully adult (i.e. a minor), thus, Allen's view that Seleucus' daughter was married with Bindusara is not correct. The other possibility that Seleucus' daughter was married with Chandragupta Maurya holds more water. If we assume that the age of young Chandragupta when he met to Alexander was not more than 20 years in 326-25 B.C. then in 306-05 B.C. at the time of Seleucus' war, his age should not be more than 40 years. At the

same time, Seleucus was 53 years old, because in B.C. 280, Seleucus Nikator was, in the 78th year of his age, murdered, and was succeeded on the Syrian throne by his son Antiochos Soter. In his 53rd year of age, he might be capable to possess a marriageable daughter.

VIII.1.2. REACTION OF TRADITIONAL HINDU SCHOLARS

All the ancient fragmentary Greek statements under interpretation of modern historians (viz. Sir William JONES; Col. Wilford, C. Lassen; and Prof. Max Muller; V.A. Smith etc.) give the clear clue, beyond all doubts, that Chandragupta Maurya was the contemporary king to the Alexander and Seleucus. But our traditional Hindu scholars of present days (viz. T.S. Narayana Sastry; M. Krishnamachariar; Pt. Kota Venkatachelam and M. Troyer) sharply reacted on this synchronism. In reality, our traditional literature e.g. Purānas etc. have no any impact or even the mention of the name of Alexander, the Greek invader. Pt. Kota Venkatachelam, an ardent traditional Hindu scholar commented on this issue as follows :

"The Greek historians who accompanied the army of Alexander the great during his invasion of Western Bhārata have mentioned of three successive kings of the country at about the time in their writings. The names recorded by them clearly were Xandrames, Sandrocottos and Sandrocyptus. But European orientalists of recent times have been able to reduce the antiquity of the history and culture of Bhārata by a wrong identification of the kings. They have wrongly identified the three names with those of Mahāpadma Nanda, Chandragupta and Bindusāra successive kings of Magadha and hence determined (wrongly) the time of Chandragupta Maurya, held he was the actual contemporary of Alexander in 326 B.C. and his coronation to have taken place in 324 B.C From this date thus arrived at as the basis, counting forward and backward for the times of the kings of the Royal dynasties of Magadha mentioned in our Purānas, reducing the periods of the reigns of kings and dynasties mentioned there in arbitrarily to suit their own convenience constructed a false history and chronology of ancient Bhārata. The Purānas definitely and specifically date the Mahābhārata war in 3138 B.C. and record

the names of kings, and the period of their reigns, from the time onwards, in unbroken succession; and according to their version, the coronation of Chandragupta should have taken place in 1534 B.C. By assigning it to 324 B.C. instead, and making this the basis date for their chronology, the entire chronology of ancient Bhārata has been shifted forward by 1210 years. On the other hand, if the name referred to as Xandrames were to be identified as the Greek version of the Chandramas in Saṇskrit or Candrasri, last king of Andhra dynasty, and the other two Sandra-cottos and Sandracyptus with Chandragupta and Samudragupta of the Gupta dynasty of the kings of Magadha, that succeeded the Andhra dynasty and locating Chandragupta I of the Gupta dynasty as the contemporary to Alexander in 326 B.C., and counting back along the dynastic lists of the Purānas, the date of Mahābhārata war should work out to 3138 B.C....."[13]

VIII.1.3. CONCLUSIVE REMARKS ON GREEK SYNCHRONISM

VIII.1.3.1. *Greek References on Nandas*

Due to the similarity of the names of Chandragupta of Maurya dynasty as well as Imperial Gupta dynasty, the above mentioned controversy arose. But Greek references also mention the predecessor of Chandragupta, who was the contemporary to the Alexander's invasion period. Those references give the clear clue that they indicated fully the personage of Nanda kings, as described by our traditional Hindu sources, who was the definite predecessor of Chandragupta of Maurya dynasty instead of Chandragupta of Imperial Gupta dynasty.

The first Nanda bore the name Mahāpaḍma or Mahāpaḍmapati, "Sovereign of an infinite host" or "of immense wealth", according to Purānas and Ugrasena according to the Mahābodhivaṃsa. The Purānas describe him as a son of the last king of the preceding line by a sudra woman. Jaina works, on the other hand, represent Nanda as the son of the coutesan by a barber. This tradition finds support

in the classical account of the pedigree of Alexander's Magadhan contemporary who was the predecessor of Chandragupta Maurya.[14] Referring to this prince who occupied the throne of Pātaliputra when, according to Plutarch, Chandragupta met Alexander in Punjab. Curtius[15] informs us that "his father was in fact a barber, scarcely starving of hunger by his daily earnings, but who, from his being not uncomely in person, had gained the affections to the queen, and was by her influence advanced to too near a place in the confidence of the reigning monarch. Afterwards, however, he treacherously murdered his sovereign and then, under the pretence of acting as guardian to the royal children, usurped the supreme authority and having put the young princes to death begot the present king.

There has been some difference of opinion as to whether "the present king" (Agrammes) of Curtius ruling in 326 B.C. refers to the first Nanda himself or to one of his sons. The classical testimony leaves no room for doubt on the point. Agrammes was born to the purple. His father had already usurped supreme authority and put the legitimate heirs to the throne to death. The description of "the present king" can hardly be applied to the first Nanda who was the 'ganikākushijaṇmā' (born of a courtesan) and whose father did not exercise sovereign power. We have, therefore, to conclude that Agrammes or Xandrammes as he called by Deodorus, belonged to the second generation of the usurping family and his father was the first Nanda, the Mahāpaḍma Nanda—Ugrasena of Indian tradition. The murdered sovereign must have belonged to the line that preceded the Nandas on the throne of Pātaliputra. The ruler who answers best to the descriptions given by Curtius and Deodorus is 'Kākavarṇa—Kālāshoka' whose tragic end is alluded to the Harshacharita and whose sons—nine or ten in number—were according to Buddhist tradition ousted by Ugrasena Nanda. The name Agrammes is possibly a distorted form of the Saṇskrit Augrasainya, "son or descendent of Ugrasena".[16]

The Nanda army was a powerful fighting machine and we are told by the classical writers that the last king of the line "kept in the

field for guarding the approaches of his country, twenty thousand cavalry, and two hundred thousand infantry, besides two thousand four-horsed chariots and what was the most formidable force of all a troop of elephants which ran upto the number of three thousands".[17] Deodorus and Plutarch raise the number of elephants to four thousand and six thousand respectively. The latter puts the strength of the army of the Gangetic nations at eighty thousands horse, two hundred thousand foot, eight thousand war chariots, besides six thouand fighting elephants.[18]

It is no wander that the lord of such an immense host should aspire to be a sole monarch, an Ekrāt (of Purānas) of the vast regions stretching from the Himālayas to the Godāvari or its neighbourhood. The historians of Alexander speak of the most powerful people who dwelt beyond the Bias as being under one sovereign. Q. Curtius Rufus, for instance, gives the following particulars, "Beyond the river (hyphasis or Bias) lay extensive deserts. Next came the Ganges, the largest river in all India, the farther bank of which was inhabited by two nations, the Gangaridae and the Prasii surpass in power and glory every people in all India, whose king was Agrammes.[19] The account of Deodorus is similar. But he called the king Xandrammes instead of Agrammes. Pliny informs us that the Prasii, surpass in power and glory every people in all India, their capital being Palibothra (Pataliputra) after which some call the people itself the Palibothri, may even the whole tract of the Ganges.

These long passages from the translations of Greek references clearly shows that the king, predecessor to Chandragupta was very powerful having a vast kingdom and his all descriptions in greek references resembles very much with our traditional references viz. Purānas, Buddhists, and of Jainas to that of Nandas. On the other hand, the references of the predecessor of Chandragupta of Imperial Gupta dynasty are in no way tally with the Greek references concerning the Indian monarch contemporary to the Alexander. The Magadha kingdom was a very little one in the reign of Chandragupta I of Imperial Gupta dynasty, because according to Pṛayāga-Pṛasaṣti

of Samudragupta, the kingdom was greatly widened during the reign of Samudragupta.

VIII.1.3.2. *Bhaviṣhya Purāna's synchronism of Seleucus and Chandragupta Maurya*

It is often claimed by the scholars—traditional as well as moderns—that traditional sources are silent about the Greek invasions of Alexander and Seleucus and thus contemporaneousness of an Indian king with that of the Alexander is not possible on the basis of indegeneous sources i.e. traditional literatures. But in fact, Bhaviṣhya Purāna really possess a verse which deals clearly with his synchronism problem :

शक्यसिंहाब्दुद्धसिंह पितुरर्द्धकृतपदम् ।। 42
चन्द्रगुप्तस्तस्य सुता पौरसाधिपते: सुताम् ।
सुलवस्य तथोद्वाह्य यावनीबौद्धतत्पर: ।। 43
पष्ठिवर्षंकृतं राज्यं विन्दुसारस्ततोऽभवत् ।
पितृस्तुल्यंकृतं राज्यमशोकस्तनयोऽभवत् ।। 44

(*Bhaviṣhya Pur.*, Pṛatisarga-parva, Ch. VI, p. 334)

Following the Buddhist tradition, mentioned in Mahāvaṃsa etc., Bhaviṣhya Purāna too relates the Chandragupta Maurya with the Solar Kshatriya race of Shākya-kula to which lord Buddha belonged. According to the verse 42: Chandragupta was the son of king Buddhi Singh of Shākya family. Chandragupta was married with the daughter of Paurasādhipati Sulūva i.e. the king Seleucus of Poros kingdom and he became a Greeko-Buddhist (43). He ruled for 60 years and his son was the Biṇdusāra and the grandson was the Ashoka (44).

According to the classical Greek sources, the Indians whose territory "bordered on the Paropanisadae" (in the Kabul valley) are known to have under Pithon till *c.* 316 B.C. According to Deodorus, Eudemus treacherously slain Poros in 317 B.C.[20] But there is a various reading ΠΡΩΤΟΝ (first) for ΠΩΡΟΝ (Poros)—and left

India to help Eumenes in his fight against Antipater. The execution of Eumenes in 316-15 B.C.[21] and the exhaustion of Antigonas in the war of 315 to 312-11 B.C.[22] left the way clear for Seleucus who returned to Babylon in 312 B.C. and soon made himself master of the whole Phrygia to the Indus.[23] Appian, to whom we are indebted for the information conveyed by the few words, seems clearly to suggest that the Indus formed the boundary between the dominians of Seleucus and Chandragupta before the two kings came to blows. The former is said to have "crossed thus Indus and waged war with Androkottos, king of the Indians, who dwelt on the banks of that stream".

In the above concern, Bhaviṣhya Purāna's verse 43 claims clearly that at the time of marriage of Chandragupta with the daughter of Seleucus, the Seleucus was also the king of Paurasa country. Thus the kingdom of Poros might be the real boundary between Chandragupta and Seleucus instead of Indus river as Greek fragments under their modern translation intended. It is an additional information given by this verse of Bhaviṣhya Purāna.

All these lengthy quotations and analyses confirm the thesis that the Chandragupta Maurya was the real contemporary king to the Alexander and Seleucus. The end of Nandas i.e. the coronation of Chandragupta Maurya was taken place precisely in 324 B.C. which is confirmed not only by the traditional sources viz. Purānas, Buddhists, and of Jainas as it was fully analysed in Ch. VII but also now by the Greek sources.

VIII.1.4. GREEK SYNCHRONISM FOR ASHOKA'S CORONATION IN HIS ROCK EDICT XIII

Beside the Greek synchronism for analysing the chronology of Chandragupta Maurya, we find another independent Greek synchronism evidence to analyse the coronation date of Ashoka Maurya, furnished by Rock Edict XIII of Ashoka himself.[24] It gives the names of five contemporary Hellenistic monarchs : 'the Yona king

Antiyoka, and beyond him four kings, viz. Turumaya, Antekina, Maka and Alikasundra'. The same monarchs are mentioned more summarily in the second Rock Edict as : 'the Yona king Antiyoka and the kings who are the neighbours of this Antiyoka'. These kings are now identified respectively with Antiochus II Theos of Syria (261-46 B.C.), Ptolemy II Philadelphus of Egypt (285-247 B.C.), Antigonus Gonatas of Macedonia (276-239 B.C.), Magas of Cyrene (*c.* 300-250 B.C.), and Alexander of Corinth (*c.* 252-244 B.C.). The date of the edict, thirteen years after the abhisheka would fall therefore between 252 and 250 B.C., the period when all the kings mentioned were living, and the year of Ashoka's coronation must therefore lie between 263 and 265 B.C. and of his accession between 269 and 267 B.C. Dr. K.A. Nilakanta Sastri assumed[25] that 483 B.C. has much better claims to be considered the true date of the Buddha era, with this, as the starting point, Prof. Sastri got 265 B.C. date for Ashoka's coronation and 269 B.C. for his accession by taking Ashoka's aceession in 214 pBm and his coronation in 218 pBm. It is seen, according to Prof. Sastri, thus these two lines of reasoning confirm and corroborate each other.

Some writers prefer to think of Alexander of Epirus who died about B.C. 255 in the place of less known Alexander of Corinth, and thus fix the date of R.E. XIII about that date i.e. 255 B.C. and fix the date of Ashoka's coronation to (255 B.C.–13=) 268 B.C. and accession in 272 B.C. For confirmation they took Buddha era beginning with 486 B.C. instead of 483 B.C. on the strength of the Chinese dotted record tradition.[26]

In my own analysis of Dīpavaṃsa in sec. VII.3, by accepting the authority of Ceylon-Burma-Siam tradition of Buddha era beginning with 544 B.C.[27] and by adding Ach. Chandavajji's vinaya-pamokkhataship period of 58 years (420-362 B.C.) in between the Thera Sonaka and Siggava. We also came to the conclusion that the Ashoka coronated in 268 B.C. But for this coronation date synchronism, I had, half-heartedly, reduced the period of Thera Siggava from his mentioned period of 55 years to 52 years in order to conclude a

dispute of 3 years crept into the Thera's chronology just from the statement for the upasampadā ordination of Thera Dāsaka. Thus if we take the mentioned 55 years period for Thera Siggava then we finally reach to the conclusion that Ashoka really coronated in 265 B.C. But how can we pick out the real coronation date of Ashoka's coronation out of the two disputed dates viz. 268 B.C. or 265 B.C., we are bound to undergo again the lengthy process of statistical analysis of traditional sources i.e. of Purānas, and Jainas.

VIII. 2. PURĀNIC MAURYA CHRONOLOGY UP TO ASHOKA

Kauṭilyaś Chandraguptaṁ tu tato rājye buiṣekṣyati
Saṭ-triṁśat tu Samā rājā bhavit-Ashoka eva ca

(*Maṭṣya Pur.*, 272/24; D.K.A., p. 27)

e Vāyu	Vā genly & Bṛahmānda Pur.
Candraguptaṁ nṛpaṁ rājye Koṭilyaḥ sthāpayiṣyati catur-viṁśat samā rājā Candragupto bhaviṣyati bhavitā Nandasāras tu pañca-viṁśat samā nṛpaḥ ṣaṭ-triṁśat tu samā rajā bhavit-Āshoka eva ca	Candraguptaṁ nṛpaṁ rājye Koṭilyaḥ sthāpayiṣyati catur-viṁśat samā rājā Candragupto bhaviṣyati bhavitā Bhadrasāras tu pañca-viṁśat samā nṛpaḥ ṣat-triṁśat tu samā rājā Ashoko bhavitā nṛṣu

(Pargiter's D.K.A.,, p. 28)

Maurya dynasty is given by all the five (historical) Purānas, but the account of it has suffered more than that of any other dynasty because its great fame in Buddhism disgraced it in brahminical eyes ? Three versions exist here, the earliest in the Maṭṣya, the second in eVāyu and the third in the Vāyu generally and the Bṛahmānda. They agree in general but have many differences. The second forms a stage of recension intermediate between the first and the third, and is the only copy that has preserved the names of all the kings. The

Maṭṣya version in all copies is incomplete and has one of its verses (V. 23) misplaced; the second king is always omitted, and the account generally begins with that of verse 2[3], putting the last two kings first, and then mentions only 4 kings—Ashoka and his three successors. All the three versions are important. The Viṣhṇu and Bhāgawat mention the kings in the same order as the Vāyu and Bṛahmānda with some differences in names.

From the above evidences, we have concluded that Maṭṣya Purāna, which was proved more reliable chronologically in our previous analyses, is silent about the chronology of first two kings. According to Vāyu and Bṛahmānda, Chandragupta Maurya ruled for 24 years; Bindusāra : 25 years and Ashoka : 36 years. The Ashoka's duration is also corroborated by the Maṭṣya Purāna. Thus according to Purānic sources, the first three kings of Mauryan dynasty ruled as follows :

Chandragupta	324-300 B.C.=24 Years
Bindusāra	300-275 B.C.=25 Years
Ashoka	275-239 B.C.=36 Years

Thus according to Purānas, Ashoka's coronation might be occurred in 275 B.C. which is not in exact coincidence with that of the analysis of Ashoka's Rock Edict XIII which gives his coronation date of either 268 B.C. or 265 B.C. The realiability of the 24 years period for Chandragupta may be questioned on the basis of following evidence : Pt. Kota Venkatachelam says[28] that the readings in the present nāgari editions of Vāyu and Bṛahmānda Purāna (चतुर्विंशत्समा राजा चन्द्रगुप्तो भविष्यति) is evidently a mistake for (चतुस्त्रिंशत्समा राजा चन्द्रगुप्तो भविष्यति) for the expression (चतुर्विंशत्) is incorrect, if it should mean 24 then it ought to be (चतुर्वींशति) in which case the metre of the verse would be wrong. This type of analysis is how much reliable ? I do'nt know but it would give an year-to-year synchronism concerning the Ashoka's coronation date 265 B.C. with reference to the analysis of the Rock Edict XIII by assuming the Aliksundra as the Alexander of Corinth.

Chandragupta	324-290 B.C.=34 years
Bindusāra	290-265 B.C.=25 years

An alternative supposition may also be tested i.e. Chandragupta might have ruled for 24 years as nāgari editions presently intended, because, this period is fully corroborated with the Buddhist accounts also. Thus, Bindusāra's period may alternatively, be extended by 10 years from 25 to 35 years as follows :

Chandragupta	324-300 B.C.=24 years
Bindusāra	300-265 B.C.=35 years

because different sources give different periods for Bindusāra in contrast to the unanimity to the assignment of the ruling period for Chandragupta. Purānas give 25 years whereas Ceylonese Burmese accounts give 27 or 28 years for Bindusāra's reign.

VIII.3. MAURYAN CHRONOLOGY IN BUDDHIST SOURCES

The alternative supposition to assign 35 years for Bindusāra is also corroborated from the analysis of Buddhist literature Manjushri-Mūlakalpa which tells about the accidental death of Chandragupta by a poisonous explosion (or more correctly boil or tumor) in following verse :

कल्याणमित्रमागम्य कृतं प्रतिबधं बहु ।
तेन कर्मपिपाकेन विषस्फोटैः स मूर्च्छितः ।।441।।

and at that time, Bindusāra was not fully adult.[29] It was quite possible because Chandragupta Maurya was the founder of a new dynasty, therefore, he might have been married few years after the coronation. So his son might not attain his full adulthood at the end of 24 years of his father's ruling period. In contrast, at the time of Bindusāra's death, Ashoka was more than an adult person having the years experience of governorship over the Takshilā and Ujjaini etc. along with the experience of the succession struggle which evidently allows the much longer ruling period for the Bindusāra than that of his father Chandragupta.

One more reliable evidence can be furnished by the Buddhist literatures viz. Mahāvaṃsa and Dīpavaṃsa etc.[30] concerning his marriage with the Vidisā-merchant's daughter "Devi" and the birth of his two children—Mahinda and Saṃghamitrā—before his accession, when he halted at Vidisā on his way to the provincial capital Ujjaini. As Mahinda was 20 years of age in the sixth year of his father's coronation,[31] his birth would fall 14 years before the coronation or 10 years before Ashoka's accession and this gives us some idea of the duration of Ashoka's political apparenticeship under his father. We may assume that the minimum age of 18 years for Ashoka when he got the birth of his son Mahendra and because he coronated at the 14 years age of his son Mahendra, thus, Ashoka was of (18+14=) 32 years approx. of age when he coronated. This corroborates with the 35 years reigning period for Bindusāra because Bindusāra was not an adult when Chandragupta died. Probably, he was an unmarried and issueless person at the time of his coronation. If Bindusāra soon married just around his coronation date then it would certainly take more than 32 years of reigning period for Bindusāra.

But the situation is not so simple, though the internal evidences securely intended, because, Buddhist sources give only 27 or 28 years for Bindusāra rather than 35 years as my findings require. As scholars prefer 28 years, the figure of Ceylonese chronicle Mahāvaṃsa, for Bindusāra. Thus, we begin with 28 years of Bindusāra's period and we seek the genuine reason for the missing of (35–28=) 7 years in the Buddhist sources.

From sec. VII.3. (Table XX) p. 108 we know that Ashoka's 26th regnal year was coincided with 247 pBm (in Thera's list) while 244 pBm (in Ceylonese and Magadha kings-list), according to Dīpavaṃsa. When we add 58 years for Thera Chandavajji between Thera Sonaka and Siggava then Ashaka's 26th regnal year may coincide with (247 pBm+58 years=) 305 pBm according to Thera's list whereas (244 pBm+58 years=) 302 pBm according to Magadha and Ceylonese kings-list. In that section, we have relied on the

authority of kings-list and have reduced Thera's list by 3 years in the period of Thera Siggava arbitrarily. But now I believe that the period of Thera's list was correct and thus Ashoka's 26th regnal year was really coincided with 305 pBm. It means that Ashoka's coronation took place in (305 pBm–26 years=) 279 pBm or (544 B.C.+279 pBm=) 265 B.C. The short-fall of 3 years in Magadha kings-list over the Thera's list may be added to Bindusāra's reign by which it may be raised upto (28+3=) 31 years. Why in Bindusāra's reign specifically and not to any one of the others ? This question may arise ! But in sec. VII.3 p. 107, I have already given enough evidence that Ach. Chandavajji's vinaya-pamokkhataship of 58 years was omitted from the list of Theras, and according to my belief, it should be done just around the epoch of Ashoka's coronation, when the orthodox school of Buddhism i.e. Theravādins were gloriously progressing under the able leadership of Thera Moggaliputta Tisya. Due to the omission of Ach. Chandavajji's 58 years, Ashoka's coronation was assigned to (276 pBm–58 years=) 218 pBm in Ceylonese chronicle Dīpavaṃsa and Mahāvaṃsa etc. and Thera's chronology was recorrected up to the Thera Dāsaka's upasampadā ordination epoch.

Now we still have missed (35–31=) 4 years for the Bindusāra's reign which can easily be compensated, if we add the 4 years interregnum period into the Bindusāra reign, inserted by the Buddhist Ceylonese chronicles between the death of Bindusāra and the coronation of Ashoka.[32] Prof. K.A.N. Sastri says : "when Bindusāra fell ill and was near his end, Ashoka left Ujjain and went over to Pushpapur (Pataliputra) and took charge of the administration of the empire. Legend implies that this was done against the wish of Bindusāra who had other ideas regarding succession, and there was an interval of 4 years between the end of Bindusāra's rule and the formal abhisheka of Ashoka from which event his regnal years are counted in the inscriptions." Ceylon legends contain two different statements—one that Ashoka killed ninty-one brothers born of different mothers, before becomming sovereign[33] and the other that after his father's

death, he caused his eldest brother to be slain before seizing the sovereignty of Pushpapur.[34] The Divyāvadāna says that when Bindusāra lying on his death-bed wanted to anoint his son Susīma, his ministers substituted Ashoka in his place : and when the dying monarch discovered the trick and become angry, Ashoka established his right by successfully calling upon the gods to give him the diadem if it was his by right.[35] But elsewhere in the same work Ashoka speaks of his attaining sovereignty by killing his enemies.[36]

The above mentioned legend in Divyāvadāna[37] gives a clear clue that when Ashoka accended to the throne, Bindusāra was still alive though he was lying on the death-bed due to the serious illness. In light of this legend, I believe that Ashoka fought the succession-war and became victorious in the life time of his father, when the father became unable to rule due to his permanent-illness. Ashoka might have imprisoned his eldest brother Susīma and accended to the throne. But Ashoka still did not able to be coronated for another 4 years until his father Bindusāra expired after the long duration bed-illness. Otherwise, who could be able to restrain an accended king Ashoka (of atleast 28 years of age) from his coronation, if his father died before the Ashoka's victory in his succession struggle. Perhaps the issue for the succession-struggle was the election of Susīma for the consecration of Prince-royal (Yuvarāja). It may be possible that after his father's death, Ashoka caused his eldest brother to be slain (after the 4 years of imprisonment) before seizing the sovereignty of Pushpapur as Mahāvaṃsa intended.[38]

If the above theory is correct, then this 4 years period which was formerly treated by the Buddhist literatures as interregnum should be added to the Bindusāra's reign and thus Bindusāra's ruling period becomes (31+4=) 35 years. And by this result, it is safe to say that Purānas (Vāyu and Bṛahmānda) actually missed 10 years in their present editions, if they really intend 25 years for Bindusāra. Thus my concluding opinion is that Ashoka really coronated in 265 B.C. in accordance with the analysis of Ashoka's Rock-Edict XIII, if Alexander of Corinth is supposed.

VIII.4. MAURYAN CHRONOLOGY IN JAINA SOURCES

All the Jaina sources[39]—literatures as well as paṭṭāvalis—unanimously announced that Mauryas ruled for 108 years only. Jaina sources do not give any particular chronological detail for individual kings, they only mention the sum-totals of the dynasties. Though Hindu Purānas give 137 years for Mauryas but they give this figure for Magadha kingdom not for Ujjain. On the other hand, as we know already that Jaina sources particularly deal with the dynasties of Ujjain kingdom, thus we now concentrate ourselves on the Ujjain kings-list. We are almost certain that upto the Ashoka, Magadha and Ujjain both the capitals were under the sway of single and united Mauryan king-ship.

A layer of obscurity shrouds the history of Mauryas after Ashoka. We are left with divergent versions of his successors. "The only certainty" as held by K.A.N. Sastri is that the great empire founded by Chandragupta and maintained in all its splendour by his son and grandson, did not long survive in its entirety. After the death of Ashoka, there was no strong hand to hold together the various parts of the empire, let alone check the forces of disintegration. From the edicts, we learn that he had many sons but the only name mentioned is Tivra. The literary sources, however, mention three sons of Ashoka—Mahendra, Kunāla, and Jalauka. It is highly probable that Tivra died before his father and Mahendra did not ascend the throne. Kunāla and Jalauka remained to be the probable successor of Ashoka. Kalhaṇa, the chronicler of Kashmir, mentioned Jalauka who became independent after his father's death.[40]

According to Purānas, Buddhist and Jaina sources, Kunāla was the successor of Ashoka in Pātaliputra. According to all Purānas, Kunāla ruled for 8 years only.[41] His blindness incapitated him to rule and so his son Sampṛati became his regent. There is a lot of confusion about the successor of Kunāla. Different sources give different names. Bandhupālita is the name of the son of Kunāla in the Vāyu Purāna. The Buddhist and Jaina (Parisisthaparvan) traditions call him Sampṛati. And the Tibetan authority Tārānath

give the name Vigatashoka. In the Maṭṣya Purāna, the name given is Daśaratha. They may be the different names of the same person or the names of various grandsons of Ashoka. The two prominent names are—Daśaratha and Sampṛati. According to Nāgārjuni Hill inscription,[42] Daśaratha presented gifts to Ājivakas. In the style of his grand-father, he took the title 'Devānāmpiya'. Dr. V.A. Smith has suggested that the Maurya empire was partitioned among Daśaratha and Sampṛati. While Daśaratha took hold of the eastern part with Pātaliputra as capital, Sampṛati got the western part with Ujjain as capital.

The Jaina tradition of Western India has much to tell about the Ashoka's grandson named Sampṛati, who is represented as having been an eminent patron of Jainism. In fact a Jaina-Ashoka to whom Tārānath says Vigatashoka. We may take Sampṛati as an able successor, who according to Bhandarkar, "in the matter of the propagation of the Jaina faith, the Jaina records speak as highly of him as Buddhist works do of Ashoka." He constructed Vihars for the Shramanas and thousands of Jaina temples. He ruled over Avanti and Western India (in addition to the eastern territories—Bhandarkar ?). He has two capitals—Pātaliputra and Ujjaini (Bhandarkar) while only one capital—Ujjaini (V.A. Smith).

Here we deal only with the Jaina chronology for Mauryas, thus, we may restrict ourselves to the Ujjain kingdom only, over which Sampṛati's rule is well attested by the Jaina literatures. We accept here, provisionally, V.A. Smith's view that eastern part was ruled by Daśaratha and the Western part by Sampṛati after Kunāla. According to Dr. Thomas, 'after Sampṛati, the Maurya empire was further disintegrated. Śāliśuka, a successor of Sampṛati ruled over Pātaliputra with a diminished imperial pretence. After that the undercurrent of disintegration came to the surface and the country was broken into pieces'. Particularly for Ujjain kingdom, we find no any evidence concerning any Maurya king after Sampṛati, who ruled (over Ujjain) only for 9 years according to all the Purānas. Jaina traditions because dealt with the Ujjain kingdom, therefore, we can now testify its 108 years duration of Mauryas over Ujjain.[43]

TABLE XXIV

	Purānas	*Buddhist literature*
Chandragupta	24	24
Bindusāra	35	28
interregnum	—	4
Ashoka	36	37
Kunāla	8	8 (Purānic)
Sampṛati	9	9 („)
Total	112	110

Purānas' total exceed by (112-108 =) 4 years in comparison to the Jain tradition due to the fact that Purānas in reality added 4 years, the so-called interregnum between Bindusāra and Ashoka, to both the kings' reign viz. to Bindusāra (coronated) and Ashoka (accended). Thus we may conclude that Ashoka actualy ruled for (36–4=) 32 years after his coronation i.e. after the death of his father and 4 years before the death of father which makes (32+4=) 36 years Purānic figure for Ashoka's reign. Thus Ashoka ruled for 265-233 B.C.; Kunāla : 233-225 B.C.; and Sampṛati : 225-216 B.C. In this way, Mauryas ruled over Ujjain for (324-216 B.C.=) 108 years as Jaina tradition intended.[44]

As regard Buddhist sources, they have intended to coronate Chandragupta in 326 B.C., thus they give (326–216 B.C.) 110 years for Maurya dynasty upto Sampṛati. But we still have to add 3 years missing period, the short-fall in Magadha and Ceylonese kings-list in comparison to the Thera's-list. It raise the figure upto (110+3=) 113 years for Mauryas in Ujjain i.e. only one year higher in comparison to the Purānas, but (113–108=) 5 years in comparison to the Jaina tradition. As regard the Mahāvaṃsa chronology, we may say, with some certainty that Mahāvaṃsa might add (37-32=) 5 years in the reign of Ashoka in order to compensate his 5 years deficit in comparison to the Purānas crept upto the end of Kālāshoka's sons which took place, accordiog to Purānas, in 402 B.C. but according to Mahāvaṃsa in 407 B.C.[45]

VIII.5. CHRONOLOGY OF JAIN YUGA-PRADHĀNAS

Prākrit Paṭṭāvali named as Duṣṣamā-Kāla sṛamna-saṃgha-stva of Dharmaghosa-sūri also gives the list of Jain Achāryas between the death of Mahāvira and the coronation of Chandragupta Maurya as follows :

TABLE XXV

1.	Gautam	12 Years
2.	Sudharma	8 Years
3.	Jambu	44 Years
4.	Prabhava	11 Years
5.	Swayāmbhuva	23 Years
6.	Yaśobhadra	50 Years
7.	Sambhūtivijaya	8 Years
8.	Bhadravāhu	14 Years
9.	Sthūlabhadrā	45 Years
		215 Years

It is said that Ach. Sthūlabhadra's death and the Chandragupta Maurya's coronation year was the same.[46] Thus Jain Acharyas' list, as given in this Paṭṭāvali concludes that only 215 years period elapsed between the death of Mahāvira and the coronation of Chandragupta Maurya.

But concerning the chronology of the first three yuga-pradhānas known as Kevalins, there is a great deal of confusion among the Śwetāṃbar and Digaṃbar sources. If compared with each other, they turn out to have only the Ach. Sudharma and Jambu figuring at the top of the lists in common. The Digaṃbars start with Gotama—Sudharma—Jambu, and in a few Śwetāṃbar lists, they are mentioned in that order. However, in the greater part of the Śwetāṃber lists, Gotama is lacking. According to a Digaṃbar source (quoted in pp. 26-27 of H.L. Jain's book) first three Acharyas, known as Kevalins, led the Jain saṃgha after the death of Mahāvira for a total of 62 years i.e. upto the 62 AV. Their individual periods are as follows :

1.	Gotama	12 years
2.	Sudharma	12 Years
3.	Jambu	38 Years
		62 Years

Whereas Śwetāmber sources, including Hemachandra's Parisisthaparvan, lacking the 12 years period of first Yuga-Pradhāna Gotama, began with the Ach. Sudharma. According to Parisisthaparvana (IV, 56-61), the first patriach, Sudharma is said to have acted as a patriach from 0-20 AV and his successor Jambuswāmin from 20-60 AV. However the text (IV, 61) says that Jambuswāmin died in 64 AV, thus giving him (64 AV-20 AV=) 44 years as given in Duṣṣamā-Kāla paṭṭāvali. In the absence of any accurate and conclusive chronological periods for the individual Jain Acharyas and the end of the Kevalins strictly with the end of Pālaka-rule in Avaṇti, I suggest the following chronological periods for the three Kevalins as follows :

1.	Gotama	12 Years	(Dig. source, p. 26)
2.	Sudharma	20 Years	(Parisisthaparvana)
3.	Jambuswāmin	38 Years	(Dig. source, p. 26)
		70 Years	

In this 70 years period of Kevalins after Mahavira's death, it may be possible that 62 years Kevalins' period (as given in Digaṃbar source, pp. 26-27) may run parallel to the Palaka's rule (545-483 B.C.) over Avaṇti. But certainly speaking, the remaining 8 years of Kevalins should extend into the reigns of Nandas (more correctly Mahānaṇdins). This 8 years period when added with the 151 years period given to the Yuga-Pradhānas from Prabhava to the Sthūlabhadra, facilitates (151+8=) 159 years (=483-424 B.C.) for Nandas (i.e. Mahānaṇdins+Nav-Nandas) over Ujjain-kingdom after the 62 years Pālaka's rule. This gives precisely a total of (70+151=) 221 years period between the death of Mahāvira and the coronation of Chandragupta Maurya in (545 B.C.–221 years=) 324 B.C.

The chronological order, in terms of Christian calendar, of Jaina Yuga-Pradhānas from the death of Māhāvira upto the end of Sampṛati's rule, the last Maurya king of Ujjain, may run as follows :

TABLE XXVI

S. No.	*Yuga-Pradhāna's Name*	*No. of Years*	*Chris. Calendar Date*
1.	Gotama	12	545-533 B.C.
2.	Sudharma	20	533-513 B.C.
3.	Jambuswāmin	38	513-475 B.C.
4.	Prabhava	11	475-464 B.C.
5.	Swayāmbhuva	23	464-441 B.C.
6.	Yaśobhadra	50	441-391 B.C.
7.	Sambhūtivijaya	8	391-383 B.C.
8.	Bhadravāhu	14	383-369 B.C.
9.	Sthūlabhadra	45	369-324 B.C.
10.	Mahāgiri	30	324-294 B.C.
11.	Suhaştin	46	294-248 B.C.
12.	Gunasundar	32	248-216 B.C.
		329 AV	545-216 B.C.

Thus Gunasundar's 32nd year is exactly coincided with that of the end of the Sampṛati's rule over Ujjain as intended by the Duṣṣāma-kāla paṭṭāvali which says that the 108 years rule of Mauryas end with the 32nd year of Gunasundar.

Therefore, we may conclude the chronology of Mauryas upto Sampṛati's rule best compromised to all sources viz. Purānas, Buddhist, Jaina, and also to the Greek references as follows :

Chandragupta	324-300 B.C.	24 years
Bindusāra	300-265 B.C.	35 years
Ashoka	265-233 B.C.	32 years
Kunāla	233-225 B.C.	8 years
Sampṛati	225-216 B.C.	9 years

We may also conclude with all certainty upto the possible extent that Ashoka certainly coronated in 265 B.C. With this conclusion,

we now finish our laborious analysis of chronology of the most controversial portion of ancient Indian history between the two much debated points viz. the birth of Parīkṣhit II contemporary to Mahābhārata war and the coronation of Ashoka Maurya with which the history of India, according to European view-point, really begins on the authority of inscriptions.

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45. Prasad, R.G.N., Chronology of North Indian Kings from the birth of Parīkshit II upto the Coronation of Ashoka Maurya, sec. VI.1.3.

46. Jain data about the accession of Chandragupta Maurya are as follows : "Sthūlabhadra died the same year as the 9th Nanda (Master of Sakatala) and the year in which Chandragupta ascended the throne (Pattāvali of Tapa-gachcha," Indian Antiquary, (I.A.), XI, p. 251. This took place 219 years after the death of Mahavira (Pattāvali of Kharataragachcha), I.A., XI, p. 246.

APPENDIX

Concise Chronological Tables

TABLE XXVII

KURUS OF HASTINĀPUR AND KAUSHAṂBI
(1339 B.C.-467 B.C.)

S. No.	*Name of the King*	*Av. Years*	*Eq Christian Calen. Date*
1.	Yuddhisthira	37	1339-1302 B.C.
2.	Parīkṣhita	60	1302-1242 ,,
3.	Harnadeva	15	1242-1227 ,,
4.	Rāmadeva	16	1227-1211 ,,
5.	Vyāsadeva	15	1211-1196 ,,
6.	Draunadeva	16	1196-1180 ,,
7.	Siṃhadeva	16	1180-1164 ,,
8.	Gopāldeva	16	1164-1148 ,,
9.	Vijayananda	15	1148-1133 ,,
10.	Sukhadeva	16	1133-1117 ,,
11.	Rāmandeva	15	1117-1102 ,,
12.	Sandhiman	16	1102-1086 ,,
13.	Marhandeva & Kāmandeva	16	1086-1070 ,,
14.	Chandradeva	16	1070-1054 ,,
15.	Ānandadeva	15	1054-1039 ,,
16.	Drupadadeva	23	1039-1016 ,,
17.	Harnāmdeva	23	1016-993 ,,

(*Contd.*)

S. No	*Name of the King*	*Av. Years*	*Eq Christian Calen. Date*
18.	Sulkandeva	23	993-970 B.C.
19.	Janamejaya III	34	970-936 ,,
20.	Śatānīka I	10	936-926 ,,
21.	Aśwamedhadatta	10	926-916 ,,
22.	Adhisīmakṛṣṇa	10	916-906 ,,
23.	Nichakṣu	18	906-888 ,,
24.	Uṣṇa	18	888-870 ,,
25.	Chitraratha	18	870-852 ,,
26.	Śuchidratha	18	852-834 ,,
27.	Vṛṣṇimat	17	834-817 ,,
28.	Suṣeṇa	18	817-799 ,,
29.	Sunītha	18	799-781 ,,
30.	Ruca	18	781-763 ,,
31.	Nṛcakṣus	18	763-745 ,,
32.	Sukhībala	17	745-728 ,,
33.	Pariplava	18	728-710 ,,
34.	Sunaya	18	710-692 ,,
35.	Medhāvin	18	692-674 ,,
36.	Nṛpañjaya	18	674 656 ,,
37.	Dhruva	17	656-639 ,,
38.	Tigmātman	24	639-615 ,,
39.	Bṛahadratha	24	615-591 ,,
40.	Vasudāna	24	591-567 ,,
41.	Śatānīka II Paramtapa	18	567-549 ,,
42.	Udayana	30	549-519 ,,
43.	Vahīnara	13	519-506 ,,
44.	Daṇḍapāṇi	13	506-493 ,,
45.	Nirāmitra	13	493-480 ,,
46.	Kṣhemaka	13	480-467 ,,

TABLE XXVIII

MAGADHA KINGDOM

S.No.	*Name of the King*	*Av. Years*	*Eq. Christian Calen. Date*
	1. *Kurus from Hastināpur*		
1.	Yuddhisthira	37	1339-1302 B.C.
2.	Parīkṣhita	60	1302-1242 ,,
3.	Harnadeva	15	1242-1227 ,,
4.	Rāmadeva	16	1227-1211 ,,
5.	Vyāsadeva	15	1211-1196 ,,
6.	Draunadeva	16	1196-1180 ,,
7.	Siṃhadeva	16	1180-1164 ,,
8.	Gopāldeva	16	1164-1148 ,,
9.	Vijayananda	15	1148-1133 ,,
10.	Sukhadeva	16	1133-1117 ,,
11.	Rāmandeva	15	1117-1102 ,,
12.	Sandhiman	16	1102-1086 ,,
13.	Marhandeva & Kāmandeva	16	1086-1070 ,,
14.	Chandradeva	16	1070-1054 ,,
15.	Ānandadeva	15	1054-1039 ,,
	2. *Bārhadṛatha Dynasty*		
16.	Somādhi	23	1039-1016 ,,
17.	Śrutaśrva	27	1016- 989 ,,
18.	Ayutāyus	15	989- 974 ,,
19.	Niramitra	16	974- 958 ,,
20.	Sukṛtta	23	958- 935 ,,
21.	Bṛahaṭkarman	9	935- 926 ,,
22.	Senājit	??	926- 906 ,,

(*Contd.*)

S.No.	*Name of the King*	*Av. Years*	*Eq. Christian Calen. Date*
23.	Śrutañjaya	16	906-890 B.C.
24.	Vibhu	11	890-879 ,,
25.	Shuchi	23	879-856 ,,
26.	Kṣhema	11	856-845 ,,
27.	Subrata	26	845-819 ,,
28.	Sunetra	14	819-805 ,,
29.	Nivṛiti	23	805-782 ,,
30.	Trinetra	11	782-771 ,,
31.	Dyumatsena	23	771-748 ,,
32.	Sumati	13	748-735 ,,
33.	Achal	13	735-722 ,,
34.	Sunetra	16	722-706 ,,
35.	Satyajit	33	706-673 ,,
36.	Vīrajit	14	673-659 ,,
37.	Repuñjaya	20	659-639 ,,
	3. *Bimbasāra Dynasty*		
38.	Kṣhemadharma	36	639-603 ,,
39.	Kṣhatroja	24	603-579 ,,
40.	Bimbasāra	28	579-551 ,,
41.	Ajātshatru	27	551-524 ,,
42.	Darshaka or Nāgadāsaka	24	524-500 ,,
43.	Udāyi	33	500-467 ,,
	4. *Mahānandin Dynasty*		
44.	Śiśunāga	23	467-444 ,,
45.	Kākavarna or Kālāshoka	20	444-424 ,,

(*Contd.*)

S.No.	*Name of the King*	*Av. Years*	*Eq. Christian Calen. Date*
		5. *Nav-Nanda Dynasty*	
46.	Nanda-suta	20	424-404 B.C.
47.	Pṛa-nanda	10	404-394 ,,
48.	Parā-nanda	10	394-384 ,,
49.	Samā-nanda	12	384-372 ,,
50.	Priyā-nanda	12	372-360 ,,
51.	Devā-nanda	12	360-348 ,,
52.	Yajña-bhanga	6	348-342 ,,
53.	Mauryā-nanda	6	342-336 ,,
54.	Mahā-nanda	12	336-324 ,,
		6. *Maurya Dynasty up to Ashoka*	
55.	Chandragupta	24	324-300 ,,
56.	Bindusāra	35	300-265 ,,
57.	Ashoka	32	265-233 ,,

TABLE XXIX
AIKŚVĀKU KINGDOM

S. No.	*Name of the King*	*Av. Years*	*Eq. Christian Calen. Date*
	1. *Kurus from Hastināpur*		
1.	Yuddhisthira	37	1339-1302 B.C.
2.	Parīkṣhit II	60	1302-1242 ,,
3.	Harnadeva	15	1242-1227 ,,
4.	Rāmadeva	16	1227-1211 ,,
5.	Vyāsadeva	15	1211-1196 ,,
6.	Draunadeva	16	1196-1180 ,,
7.	Siṃhadeva	16	1180-1164 ,,
8.	Gopāladeva	16	1164-1148 ,,
9.	Vijayananda	15	1148-1133 ,,
10.	Sukhadeva	16	1133-1117 ,,
11.	Rāmandeva	15	1117-1102 ,,
12.	Sadhiman	16	1102-1086 ,,
13.	Marhandeva & Kāmandeva	16	1086-1070 ,,
14.	Chandradeva	16	1070-1054 ,,
15.	Ānandadeva	15	1054-1039 ,,
16.	Drupadadeva	23	1039-1016 ,,
17.	Harnamdeva	23	1016- 993 ,,
	2. *Aikśvāku Dynasty*		
18.	Brhatksya	17	993-976 ,,
19.	Uruksya	18	976-958 ,,
20.	Vatsavyuha	17	958-941 ,,
21.	Prativyoma	18	941-923 ,,
22.	Divakara	17	923-906 ,,

(Contd.)

S.No.	*Name of the King*	*Av. Years*	*Eq. Christian Calen. Date*
23.	Sahadeva	13	906-893 B.C.
24.	Brhadasva	13	893-880 ,,
25.	Bhanuratha	13	880-867 ,,
26.	Pratitasva	13	867-854 ,,
27.	Supratika	14	854-840 ,,
28.	Marudeva	13	840-827 ,,
29.	Sunakshatra	13	827-814 ,,
30.	Kinnarasva	13	814-801 ,,
31.	Antariksha	13	801-788 ,,
32.	Suparna	14	788-774 ,,
33.	Amitrajit	13	774-761 ,,
34	.Bṛhadbhraja	15	761-746 ,,
35.	Dharmin	13	746-733 ,,
36.	Krtanjaya	15	733-718 ,,
37.	Rananjaya	14	718-704 ,,
38.	Sanjaya	13	704-691 ,,
39.	Sakya	34	691-657 ,,
40.	Suddhodana	73	657-584 ,,
41.	Rahula	38	584-546 ,,
42.	Prasenajit	20	567-547 ,,
43.	Viruddhaka or Ksudraka	20	547-527 ,,
44.	Kulaka	20	527-507 ,,
45.	Suratha	20	507-487 ,,
46.	Sumitra	20	487-467 ,,

TABLE XXX

KASHMIR KINGDOM

S. No.	*Names of the Kings*	*Av. Years*	*Eq Christian Calen. Date*
1.	Gonaṇda II	56½	1352-1296 B.C.
2.	Parīkṣhita II	42	1296-1254 ,,
3.	Harnadeva	27	1254-1227 ,,
4.	Rāmadeva	16	1227-1211 ,,
5.	Vyāsadeva	15	1211-1196 ,,
6.	Draunadeva	16	1196-1180 ,,
7.	Siṃhadeva	16	1180-1164 ,,
8.	Gopāldeva	16	1164-1148 ,,
9.	Vijayananda	15	1148-1133 ,,
10.	Sukhadeva	16	1133-1117 ,,
11.	Rāmandeva	15	1117-1102 ,,
12.	Sandhiman	16	1102-1086 ,,
13.	Marhandeva & Kāmandeva	16	1086-1070 ,,
14.	Chandradeva	16	1070-1054 ,,
15.	Ānandadeva	15	1054-1039 ,,
16.	Drupadadeva	23	1039-1016 ,,
17.	Harnāmadeva	23	1016- 993 ,,
18.	Sulkandeva	23	993- 970 ,,
19.	Sināditya	10	970- 960 ,,
20.	Mangalāditya	10	960- 950 ,,
21.	Khimendra	8	950- 942 ,,
22.	Bhīmasena	22	942- 920 ,,
23.	Indrasena	21	920- 899 ,,
24.	Sunderasena	22	899- 877 ,,
25.	Gālgendra	21	877- 856 ,,

(*Contd.*)

S.No.	*Name of the King*	*Av. Years*	*Eq. Christian Calen. Date*
26.	Bāldeva	22	856-834 B.C.
27.	Nalasena	21	834-813 ,,
28.	Gokarna	22	813-791 ,,
29.	Prahalād	21	791-770 ,,
30.	Bambru	22	770-748 ,,
31.	Pratāpaseela	21	748-727 ,,
32.	Samgrāmchandra	22	727-705 ,,
33.	Larikchandra	21	705-684 ,,
34.	Birāmchandra	22	684-662 ,,
35.	Babighana	22	662-640 ,,
36.	Bhāgwant	22	640-618 ,,
37.	Lava	39	618-579 ,,
38.	Kuśa or Pukkusati	39	579-540 ,,
39.	Khagendra	39	540-501 ,,
40.	Surendra	39	501-462 ,,
41.	Godhara	39	462-423 ,,
42.	Suvarna	39	423-384 ,,
43.	Janak	39	384-345 ,,
44.	Sachinār	31	345-314 ,,
45.	Unknown King	30	314-284 ,,
46.	Dharma-Ashoka	48	284-236 ,,

TABLE XXXI

POST-WAR CONTEMPORARY KINGS-LIST OF NORTHERN INDIA

Bārhadṛathas	*Kurus*	*Aikśvakus*	*Kashmirians*
Sahadeva	Duryodhana	Bṛahadbala	Dāmodar I
Meghasaṇdhi	,,	—	Gonaṇda II
Yuddhisthira	Yuddhisthira	Yuddhisthira	Yuddhisthira
Parīkṣhita II	Parīkṣhita II	Parīkṣhita II	Parīkṣhita II
Harnadeva	Harnadeva	Harnadeva	Harnadeva
Rāmadeva	Rāmadeva	Rāmadeva	Rāmadeva
Vyāsadeva	Vyāsadeva	Vyāsadeva	Vyāsadeva
Draunadeva	Draunadeva	Draunadeva	Draunadeva
Siṃhadeva	Siṃhadeva	Siṃhadeva	Siṃhadeva
Gopāldeva	Gopāldeva	Gopāldeva	Gopāldeva
Vijayananda	Vijayananda	Vijayananda	Vijayananda
Sukhadeva	Sukhadeva	Sukhadeva	Sukhadeva
Rāmandeva	Rāmandeva	Rāmandeva	Rāmandeva
Sandhiman	Sandhiman	Sandhiman	Sandhiman
Marhan & Kāmandeva	Marhan & Kāman	Marhan & Kāmandeva	Marhan & Kāmandeva
Chandradeva	Chandradeva	Chandradeva	Chandradeva
Ānandadeva	Ānandadeva	Ānandadeva	Ānandadeva
Somādhi	Drupadadeva	Drupadadeva	Drupadadeva
Śrutaśrava	Harnāmadeva	Harnāmadeva	Harnāmadeva
Ayutāyus	Sulkandeva	Bṛhatkṣya	Sulkandeva
Nirāmitra	Janamejaya III	Urukṣya	Sināditya
,,	,,	,,	Mangalāditya
Sukṛtta	,,	,,	Khimendra

(*Contd.*)

Bārhadṛathas	*Kurus*	*Aikśvākus*	*Kashmirians*
Sukṛtta	Śatānīka I	Vatsavyūha	Bhīmasena
Bṛahaṭkarman	Aśwamedhadatta	Prativyoma	,,
Senājit	Adhisīmakṛṣṇa	Divākara	Indrasena
Śrutañjaya	Nichakṣu	Sahadeva	Sur darasena
Vibhu	Uṣṇa	Bṛahadāśva	Galgendra
,,	,,	Bhānuratha	,,
Suchi	Chitraratha	Pratītāśva	,,
Kṣema	Śuchidratha	Supratīka	Bāldeva
Suvrata	Vṛṣṇimat	Marudeva	Nalasena
,,	,,	Sunakṣhatra	,,
Sunetra	Suṣeṇa	Kinnarāśva	Gokarna
Nirviti	Śunītha	Antarikṣha	,,
Trinetra	Ruca	Suparna	Prahalād
Dṛdhasena (Dyumatse)	Nṛcakṣus	Amitrajit	Bambru
,,	,,	Bṛhadbhrāja	,,
Sumati	Sukhībala	Dharmin	Pratāpseela
Achal	Pariplava	Kṛtañjaya	Sangrāmachandra
Sunetra	,,	Raṇañjaya	,,
Satyajit	Sunaya	Sañjaya	Larikchandra
,,	Medhāvin	Śākya	Birāmchandra
Vīrajit	Nṛpañjaya	,,	,,
Repuñjaya	Dhruva	Śuddhodana	Babighana
Kṣhemadharma	Tigmātman	Brother of Suddho	Bhāgwat
,,	Bṛahadratha	Fa. of Mahakosala	Lava
Kṣhatroja	Vasudāna	Mahakosala	Kuśa or Pukkusat
Bimbasāra	Śatānīka II	Prasenajit	,,

(*Contd.*)

Bārhadṛathas	*Kurus*	*Aikśvākus*	*Kashmirians*
Ajātshatru	Udayana	Viruddhaka	Khagendra
Darshaka	Vahīnara	Kulaka	,,
Udāyi	Daṇḍapāṇi	Suratha	Surendra
,,	Niramitra	,,	,,
,,	Kṣhemaka	Sumitra	,,
Śiśunāga	Śiśunāga	Śiśunāga	Godhara
Kākavarna	Kākavarna	Kākavarna	,,
Nanda-suta	Nanda-suta	Nanda-suta	Suvarna
Pṛa-Nanda	Pṛa-Nanda	Pṛa-Nanda	,,
Parā-Nanda	Parā-Nanda	Parā-Nanda	,,
Samā-Nanda	Samā-Nanda	Samā-Nanda	Janak
Priyā-Nanda	Priyā-Nanda	Priyā-Nanda	,,
Devā-Nanda	Devā-Nanda	Devā-Nanda	,,
Yajña-Bhanga	Yajña-Bhanga	Yajña-Bhanga	Sachinār
Mauryā-Nanda	Mauryā-Nanda	Mauryā-Nanda	,,
Mahā-Nanda	Mahā-Nanda	Mahā-Nanda	,,
Chandragupta Maurya	Chandragupta	Chandragupta	Unknown King
Bindusāra	Bindusāra	Bindusāra	,,
Ashoka	Ashoka	Ashoka	Dharma-Ashoka

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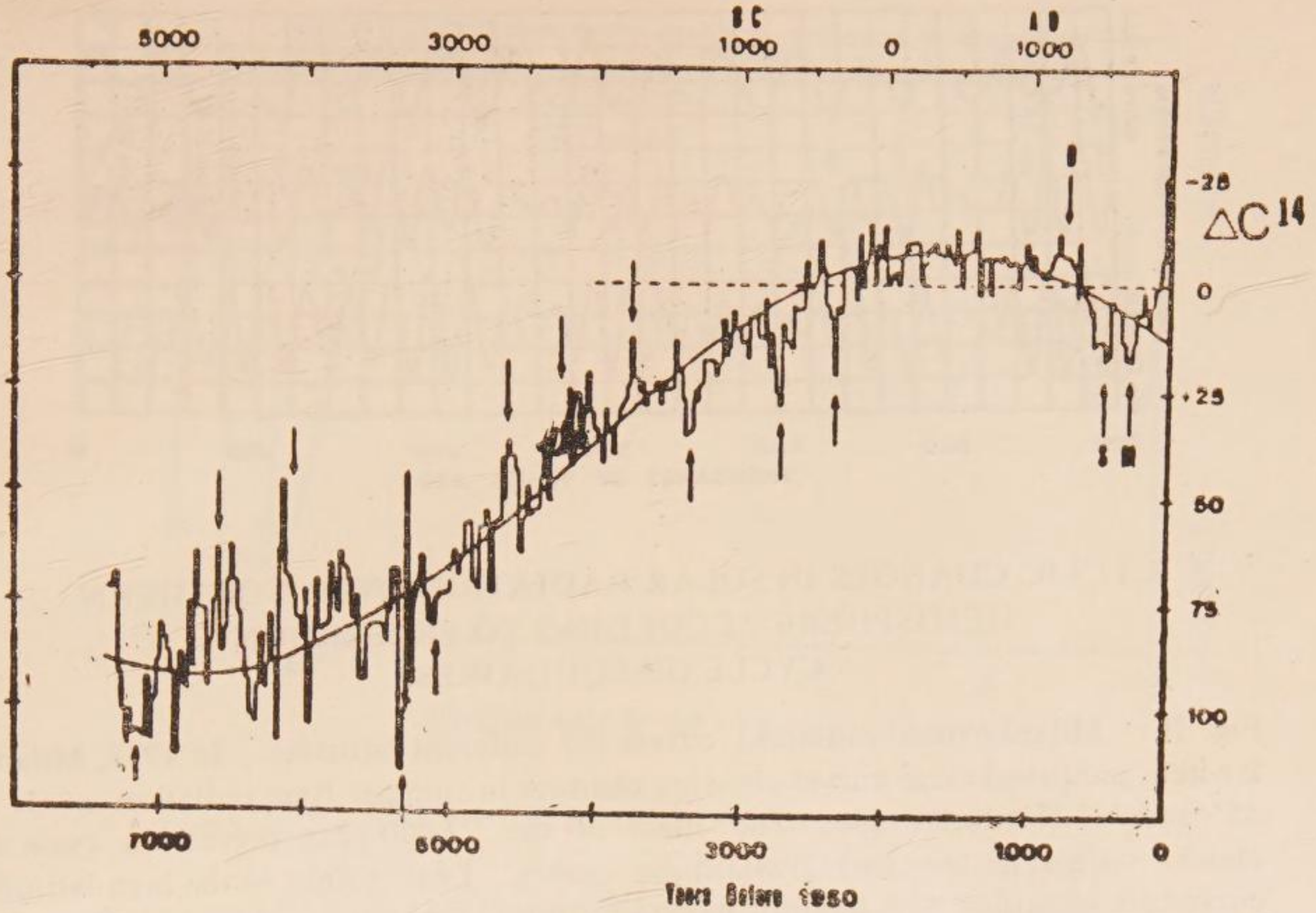
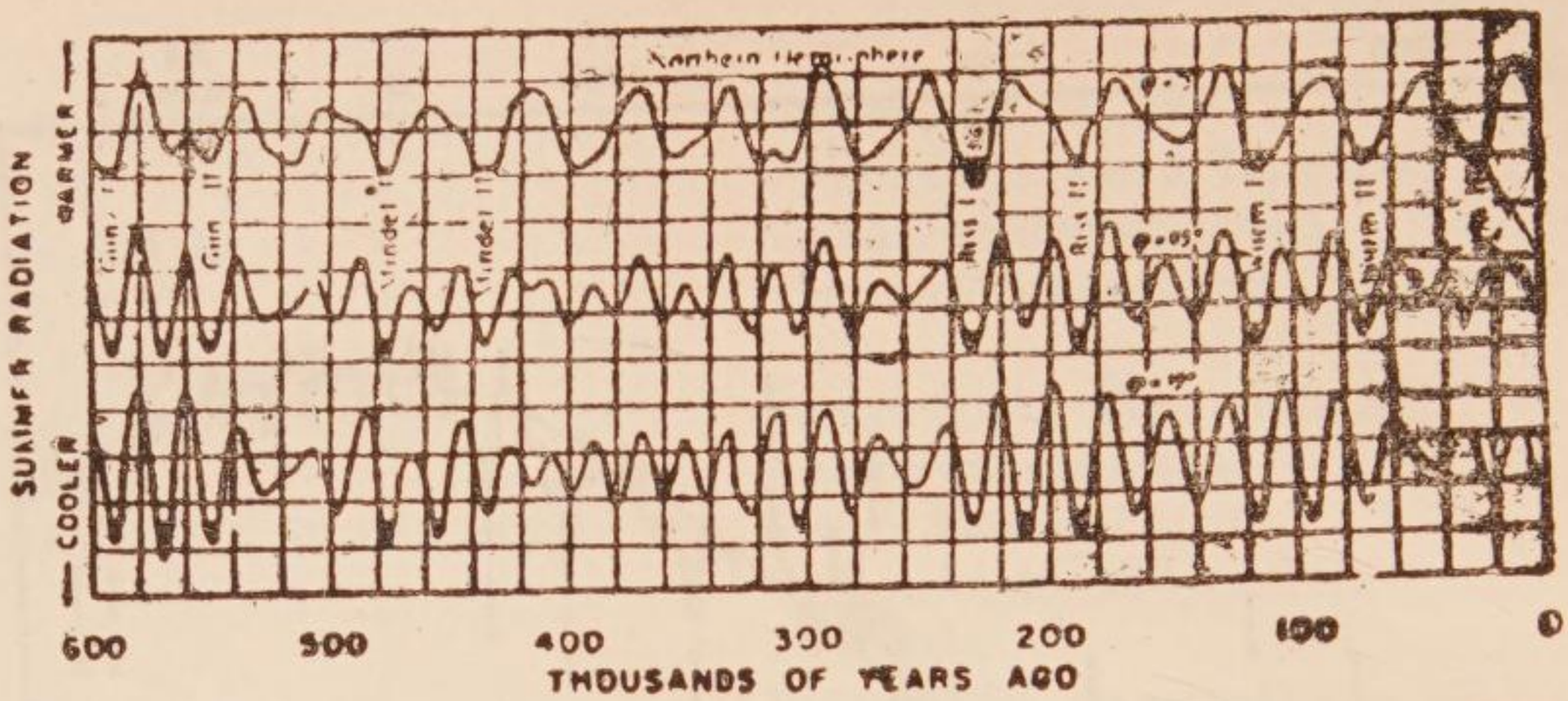


GEOMAGNETIC CYCLE OF 12,000 YEARS DERIVED FROM CARBON-14 DATA

Fig. I : Record of deviations of relative atmospheric carbon-14 concentration for tree ring analysis, in parts per mil, for about 7000 years before the present (B.P.) from Lin et al. [18]. Increased relative abundances (positive deviations) are plotted downward from the A.D. 1890 norm, which is shown as a dashed line. Solid curve (from same reference) is a sinusoidal fit which matches very closely the observed change in terrestrial magnetic field strength. Remaining significant features are of probable solar cause; some of the ones noted in Table-I are marked with arrows. M=Maunder Minimum. S—Spörer Minimum, D—Medieval Maximum. (Courtesy : Eddy, J.A , Climate and the Changing Sun, Climatic Change, 1, (1977). 177, D. Reidel Publishing Company, Dordrecht, Holland).

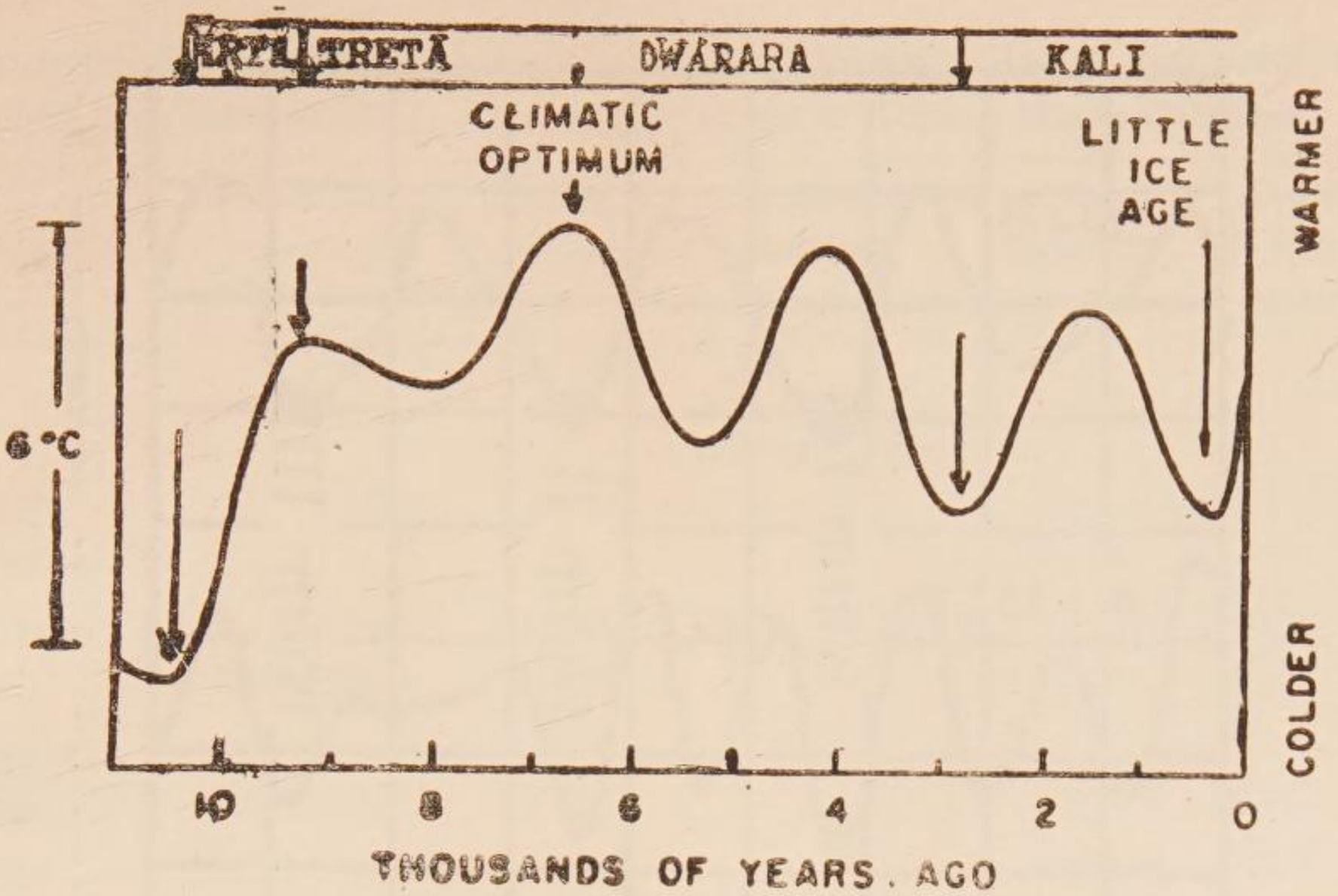
It is the first scientific evidence to correlate the ancient Hindu chaturyuga concept of 10,000 to 12,000 years with a Geomagnetic cyclic phenomenon of the same duration whose minima coincided approx. 5,000 B.C. whereas maxima with 200 A.D. To a first approximation the overall envelope of the observed Carbon-14 curve is explained as a result of slow and apparently cyclic changes (10,000-12,000 years period) in the strength of the terrestrial magnetic field.



CYCLIC CHANGES IN SOLAR RADIATION OVER NORTHERN HEMISPHERE ACCORDING TO PRECESSION CYCLE OF EQUINOXES

Fig. II : Milankovitch radiation curves for different latitudes. In 1938, Milankovitch, published these curves showing changes in summer time radiation at 15°, 45°, and 75° North latitude. The effect of the 22,000-year precession cycle is clearly visible in the two low-latitude curves. Low points in the high-latitude curves are identified with the four named European ice ages. (Adapted from M. Milankovitch, 1941.) (Courtesy : Imbrie, J., & K.P., Ice Ages—Solving the Mystery, p. 108, The Macmillan Press Ltd., London, 1979; Original source : Milankovitch, M., 1941, Kanon der Erdbestrah lung und seine Andwendung auf das Eiszeitenproblem, Royal Serb. Acad., Spec. Publ., 133, Belgrade, pp. 1-633. English translation published in 1969 by Israel Program for Scientific Translation available from U.S. Dept. Comm.).

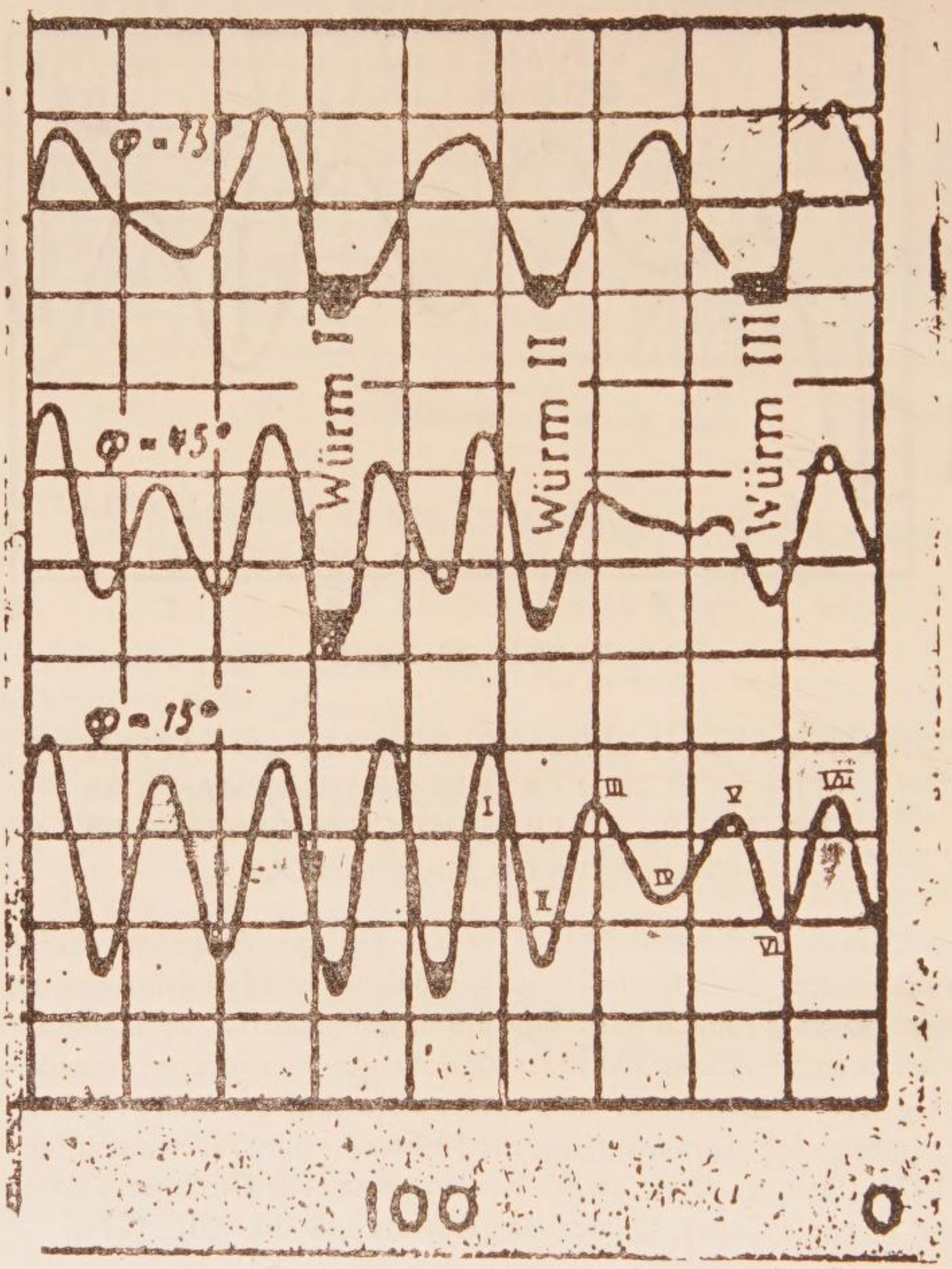
Ancient Hindu chaturyuga concept is particularly related, according to ancient Purānas, to the region of Bhāratavarsha i.e. to the lower latitudes only where the influence of precession cycle, according to Milankovitch, dominates over the influence of axial-tilt cycle. We use 25,920 years (Plato's great year) period for a complete precession cycle and thus two successive chaturyugis of 12,000 years separated by two junction periods of 960 years each may constitute a full (12,000+960+12,000+960=25,920) precession cycle. For verification, one may treate the geological record of climate, statistically. An analysis of deep sea cores, shows that no pliestocene interglacial has lasted more than 12,000 years and that most of have had a life span of about 10,000 years.



DENTON-KARLEN CLIMATOLOGICAL PLOT APPLIED FOR
THE INTERPRETATION OF DHARMA-PĀDA
STRUCTURE OF PRESENT CHATURYUGA I.E.
VAIVAṢVATA MANVAṆTARA

Fig. III : Climate of the past 10,000 years. This graph shows general trends in global temperature, as estimated from geological records of mountain glaciers and fossil plants. During the Climatic Optimum, temperatures were about 2°C warmer than they are today. About 300 years ago, during a climatic episode known as the Little Ice Age, temperatures were cooler than they are today (Courtesy : Imbrie, J., & K P. Imbrie, Ice Ages—Solving the Mystery, p. 179, Macmillan Company, London, 1979; Denton, G.H., & W. Karlen, Holocene Climatic Variations—Their Pattern and Possible Cause, Quaternary Research, 3, 155-205, 1973).

Statistically speaking, the present interglacial, i.e. the holocene, is already on its last legs, tottering along the advanced age of 10,500 years and can be expected to end within the next 1500 years. If we equate the Sanskrit term 'Dharma-pāda' with the either direction of average global climatic fluctuation, then the Denton-Karlen plot depicts the same start and end epochs for the individual yugas—Kṛta; Tretā; Dwāpara & Kali as it was calculated on the basis of Sūrya Siddhāṇta 1/15-17, when we start the Vaivaṣvata manvaṇtara i.e. holocene epoch with 8508 B.C. with which Dhṛuva samvaṭsara i.e. Polar era of Maṭṣya 56/14 and Vāyu 39/18 began.



ENLARGED VIEW OF MILANKOVITCH RADIATION CURVES APPLIED TO THE MANVAṆTARA THEORY OF ANCIENT HINDU CALENDAR

Fig. IV : According to the Hindu calendar theory, under my calculations, 14 Manvaṇtaras makes a mahāyuga instead of a Kalpa. Manvaṇtara is an equivalent term to the Chaturyuga, thus one precession cycle is equal to the two manvaṇtaras with their sandhi-periods. 6 manvaṇtaras has already past and we live in the 7th, Vaivaṣvata manvaṇtara. Therefore, the beginning of the Swayāṃbhuva, the first manvaṇtara i.e. first cycle out of the last 3 cycle may coincide with the approx. 90,000 years ago epoch as per the Hindu calculation endorses contrary to the lower C^{14} and geological dates for the framdale epoch beginning.

Fig. V

Comparison Between the Six substages of 4th (Wurm) Glacial Age with the Past Six Manvantaras of the Present Mahayuga of Ancient Hindu Calendar

	Loess	*Radio-Carbon (years ago)*	*Geological (years ago)*	*Equilibrium method (years ago)*		*Hindu manvaṇ-taras*	*End epoch (Christian calendar)*	
				by (Anthenes)	by (Kay)			
6.	Valders (advance) (b)	11400	11000			Chāksh-husha	9468	B.C.
5.	Mankato	12000	15000	12000	25000	Raivata	22428	,,
4.	Cary	14000-13000	26000			Tāmas	35388	,,
3.	Tazedvell (sediment)	19000-15000	37000			Uṭṭama	48348	,,
2.	Lowan (wood)	23000-21000	51000			Swāroś-chisha	61308	,,
1.	Framdale (wood)	25000-29000	64000			Swayāṃ-bhuva	74268	,,

(a) Equilibrium method : "percent of equilibrium for Uranium, Ionium & Radium".

(b) Sweden 6839 B.C. : De Geers by advance method (see Wheeler : New Techniques in Archaeology, p. 389, outlines of Modern Knowledge),

(c) The Radio Carbon method gives low dates (about half of the geological dates. Therefore, in the meantime, respect is held for carefully documented stratigraphic work and sampling of geologists.

(d) The end of Valders, the 6th substage, or the end of the 6th manvaṇtara, the Chākshhusha, of ancient Hindu calendar exactly coincides in all the dating systems viz. radio-carbon; geological; precession cycle and also in Hindu calendar system.

(e) The end of Mankato or Raivata (of Hindus), the 5th, is estimated to a latter epoch by radio-carbon and geological methods but the epoch estimated by equilibrium method (by Kay) is exactly coincided with the Hindu system of calculation.

(f) The interval between the substages 1st to 5th had an average of 12000 years according to geological method which is approximately equal to the half precessional cycle of equinoxes and also to the duration of Hindu manvaṇtaras. The effect of precessional cycle and their duration may easily be verified by the Milankovitch radiation curves for low latitudes viz. 15°.

Fig. VI

CHRONOLOGICAL DETAILS OF 14 *MANVAṆTARAS* OF THE PRESENT (71st) *MAHĀYUGA*

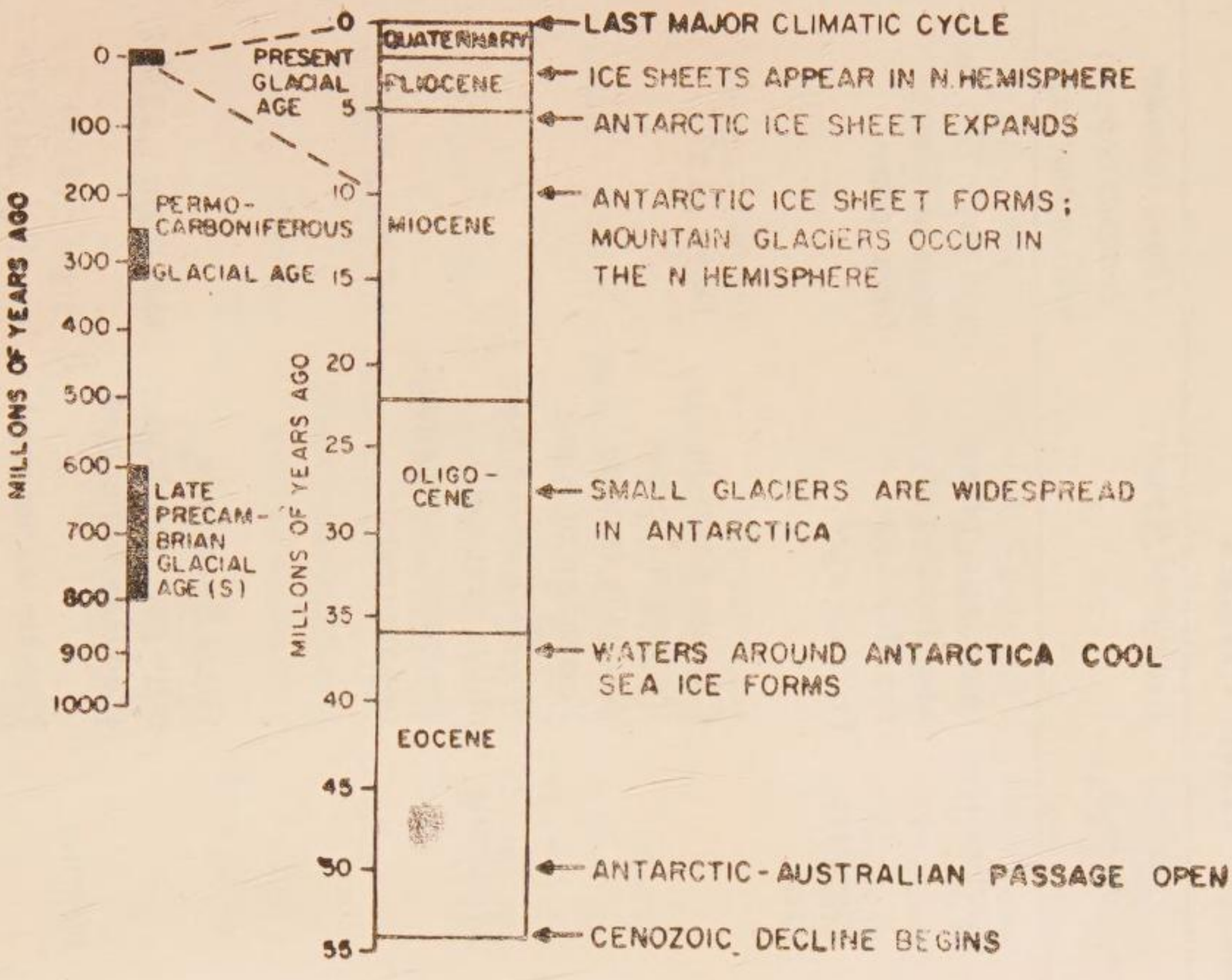
Introductory dawn 87,468-86,268 BC

Name of	(1)		(2)		(3)		(4)
manvaṇtara	*Swayambhuwa*	twilight	*Swaraschisa*	twilight	*Uṭṭama*	twilight	*Tamas*
duration (Savana years)	12,000	960	12,000	960	12,000	960	12,000
Start and end of epoch	86,268-74,268 BC	74,268-73,308 BC	73,308-61,308 BC	61,308-60,348 BC	60,348-48,348 BC	48,348-47,388 BC	47,388-35,388 BC

Name of		(5)		(6)		(7)	
manvaṇtara	twilight	*Raivata*	twilight	*Chakshusha*	twilight	*Vaivaṣvata*	twilight
duration	960	12,000	960	12,000	960	12,000	960
start and end of epoch	35,388-33,428 BC	34,428-22,428 BC	22,428-21,468 BC	21,468-9,468 BC	9,468-8,508 BC	8,508 BC-AD 3,492	AD 3,492-4,452

name of	(8)		(9)		(10)		(11)
manvaṇtara	*Savarni*	twilight	*Daksha Sāvarni*	twilight	*Brahma Sāvarni*	twilight	*Dharma Sāvarni*
duration	12,000	960	12,000	960	12,000	960	12,000
start and end of epoch	AD 4,452-16,452	AD 16,452-17,412	AD 17,412-29,412	AD 29,412-30,372	AD 30,372-42,372	AD 42,372-43,332	AD 43,332-55,332

name of		(12)		(13)		(14)	
manvaṇtara	twilight	*Rudra Sāvarni*	twilight	*Ruchi*	twilight	*Bhaom*	twilight
duration	960	12,000	960	12,000	960	12,000	960
start and end of epoch	AD 55,332-56,292	AD 56,292-68,292	AD 68,292-69,252	AD 69,252-81,252	AD 81,252-82,212	AD 82,212-94,212	AD 94,212-95,172



LONG REGIME GLACIATION CYCLE APPLIED FOR THE KALPA-AHORÂTRA NOTATION OF ANCIENT HINDU CALENDAR

Fig. VII : The last billion years of climate. Intervals when ice sheets occurred in polar regions are indicated on the left as glacial ages. An outline of significant events in the Cenozoic climate decline is given on the right. (Courtesy : Imbrie, J., & K.P. Imbrie, Ice Ages—Solving the Mystery, p. 190, The Macmillan Company, London, 1979).

Scientifically speaking, it may be related to the Sun's orbit around the Galatic core. Hindu calendar computations give 1000 mahāyuga period for a Kalpa whereas 2000 mahāyuga period for an Ahorātra notation of Bṛahmā. An Ahorātra is thus equal to 365.28 million years period of humans. Therefore, we can find late pre-Cambrian glaciation of 700 million years ago; Permo-Carboniferous glaciation of 300 milllon years ago and the present, late-Cenozoic began from 55 million year ago as the day epochs of 34th; 35th (paḍma) and 36th (vārāha) Kalpas respectively

Fig. VIII

GEOLOGICAL TIME CHART APPLIED FOR THE LAST THREE KALPA PERIOD

GEOLOGICAL TIME CHART

Geological Era	*Period*	*Epoch*	*Starting date (million year ago)*	*Principal animals*	*Geological feature*	*Hindu calendar computations (in million years ago)*	
Neozoic	Quaternary	Holocene	.011	Modern man	Interglacial phase after the end of fourth ice-age	mid day : 77.8 m. years in future from today	3 6 t h
		Plicatocene	2	Primitive man	Four ice-ages		
Cenozoic	Tartiary	Plieocene	13		Climate warm in the beginning but gradually cooling, Formation of Alpas and Himalyas, start of late cenozoic glaciation, emergence of continents.	Day : 12.87 —dawn : 58.53	V A R A H ↓ — ↑ 3 5
		Miocene	25				
		Oligocene	36	Mammals			
		Eocene	58				
		Palcocene	65				
Mesozoic	Cretaceous		135		Great Swamps in early part; low land gradually submerged.	mid night : 127.02	t h
	Jurassic		180	Reptiles		night : 193.51	
	Triassic		225		Climate warm; great desert areas.	evening : 241.17	P A

Paleozoic	Permian	270		Mountain building; glaciation of permo-carboniferous age	mid day : 309.66	D M A
	Carboniferus	350	Amphibians		day : 378.15	↓
	Devonian	400	Fishes	Emergence of land.	—dawn : 423.81	—
	Silurian	440		Extensive continental seas; low lands increasingly arid as land rose	mid night : 492.3	↑
	Ordovician	500	Marine in vertebrates, no land invertebrate fossils	Great submergence of land, warm climate even in Arctic.	night : 560.79	3
	Cambrian	600		Lands low climate mild, abundant fossils	evening : 606.45	4
	Precambrian		Few fossils of protozoans sponges, radio larians blue-green algae etc.	Glaciation of late precambrian age.	mid day : 674.94	t
						h
				Great sedimentation extensive errosion, repeated glaciations	day : 743.43	↓
Proterozoic		1200			—dawn : 789.09	—
Archaeozoic		3500	Microfossils of bactria			
Azoic		4500				

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I S B N : 81 - 7186 - 00 - 36

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